ALL HANDS

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AUGUST 1958

ARIZONA

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

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• **FRONT COVER: A GASSER—** USS *Harry E. Hubbard* (DD 748) takes on fuel from USS *Bon Homme Richard* (CVA 31) as the two ships make their way through Pacific off Okinawa.

• **AT LEFT: SILENT TRIBUTE—**USS *Bennington* (CVA 20) pays homage to the sunken battleship USS *Arizona* (BB 39) which still stands as a shrine to Navymen who lost their lives in the 7 December attack. Note the outline of *Arizona*'s bow beneath the water. (See story on page 46).

• **CREDITS:** All photographs published in ALL HANDS are official Department of Defense Photos unless otherwise designated.

WHAT'S GOING ON IN THE

"The time has come," the Walrus said,
"To talk of many things:
Of subs—and "cans"—and carriers—
Of missiles—and of wings"

THIS PARAPHRASING of a stanza by Lewis Carroll is appropriate today when every sailor lives in a "wonderland" of talk concerning nuclear-powered submarines and surface ships, guided missiles and supersonic aircraft.

But few Navymen are driven through the seas by atomic power, and only a small portion of the gunner's mates have traded in the conventional five- and eight-inch guns for guided missiles. Many pilots have known the thrill of smashing the sound barrier, but there are still some who haven't, and many destroyers which hunt submarines during training exercises still use hedgehogs, conventional torpedoes and depth charges.

But the "wonderland" of new developments is just over the horizon. In fact, its vanguard is already with us in the form of three nuclear-powered submarines which will grow into a force, of 10, then 20 and even more. Guided missile cruisers foretell the approaching *Long Beach*, CG (N) 9 which, like a new giant aircraft carrier, will be driven by nuclear reactors. As fast as these new ships cross over the horizon they replace dated combat units.

For instance, the Navy recently announced that 31 new and converted ships, designed to fight the total war of atomic retaliation as well as the limited conflict of the Korean type, will replace 48 veteran ships destined for mothballing during the next fiscal year. In addition, 14 destroyer-type ships now serving with the Fleet will be assigned Reserve training duties.

Largest and most significant items on the inactivation list are the four aircraft carriers destined to leave the Fleet. They are uss *Boxer* (CVS 21), *Philippine Sea* (CVS 47), *Leyte* (CVS 32) and *Princeton* (CVS 37). *Boxer* is taking part in Operation Hardtack, the atomic tests at the Pacific Proving Grounds, while the other three have been employed in antisubmarine training. They will be replaced in the ASW lineup by three reclassified CVAs.

NEW LOOK AT SEA—USS *Du Pont (DD 941)* in wake of USS *Ranger* (CVA 61).

REPLACING THE CARRIERS on the Fleet roster will be *Independence* (CVA 62), currently scheduled for completion in April 1959, and the converted *Oriskany* (CVA 34) which will be recommissioned early in the same year. The Fleet has already gained the services of the modernized *Franklin D. Roosevelt* (CVA 42), *Midway* (CVA 41) and the new *Forrestal* (CVA 59), *Saratoga* (CVA 60) and *Ranger* (CVA 61).

Another indication of the present-day trend is suggested by the list of four cruisers being inactivated. Three of our newer cruiser types, uss *Salem* (CA 139), flagship for the Sixth Fleet for the past two years, and the light cruiser uss *Worcester* (CL 144) and *Roanoke* (CL 145), were included on the list to be inactivated along with older *Columbus* (CA 74).

For atomic age replacements the Navy is looking to *Galveston* (CLG 3) which will complete her fitting-out period in September and join the Fleet with her *Talos* missile armament. She is the first of six light cruisers undergoing missile conversions. Her sistership, *Little Rock* (CLG 4) and *Oklahoma City* (CLG 5), will join the Fleet in the first half of 1959.

The remainder of the ships headed for inactivation are of the destroyer and patrol types as well as a number of Fleet auxiliaries. Also, 11 submarines, made up of five SSRs, an SSK, and five conventional sub-

FLEET?

marines, are on the inactivation list.

Pacific Fleet will lose 25 ships as a result of the reduction, while the East Coast force will drop 23 ships from its listings. (See page 8 for a complete listing of the ships, their homeports and inactivation dates.)

These inactivations, latest in a series that will reduce the Navy from 970 ships in mid-1957 to 864 by 30 Jun 1959, are being made to make room for new and converted ships due to join the Fleet during fiscal 1959 and to reduce the over-all number of active Fleet units to the total made necessary by the Navy's personnel program. The ships named were selected on a basis of providing the most effective employment of personnel and funds during the forthcoming year and to give the best balance of naval forces possible within the limits of total forces available.

HOWEVER, as was stated earlier, that wonderland is just around the corner. Reports on new construction and conversions show 117 being built from the keel up and 22 existing hulls undergoing conversion (totals as of 1 April). All of the new ships are scheduled for delivery by the end of 1961 and include such items as the 85,000-ton nuclear-powered carrier *Enterprise,* CVA (N) 65, the nuclear-powered cruiser *Long Beach,* 13 guided missile destroyers, and 17 nuclear-powered submarines.

This listing includes the three nuclear-powered Fleet ballistic missile submarines under construction. Contracts for the three *Polaris*-launching platforms were let only recently.

The present conversion program will bring 19 redesigned ships to the Fleet by 1960. Nine cruisers are undergoing the guided missile treatment (work on two has been suspended). This modernization will give them the ability to provide air protection for fast carrier striking forces or amphibious landings. Two carriers are being modernized and four YAGRs are being readied for ocean station radar duties.

The proposed 1959 shipbuilding program includes 20 new ships, 13 of which will have guided missile capabilities (seven frigates, five destroyers, one submarine). Six of the ships for which the Navy is requesting authorization are nuclear-powered—a guided missile frigate and five nuclear-powered submarines. An auxiliary and two amphibious assault ships complete the new ship procurement plan which also calls for funds for long-lead-time components of a nuclear-powered attack carrier which will be included in the 1960 request.

WHAT'S THIS?—USS *Skipjack,* SS(N) 585, is an unusual sight on the ways.

Under the proposed 1959 conversion program the Navy hopes to convert two cruisers to guided missile ships capable of launching a wide variety of powerful missiles. The sea service also wants to replace the sodium reactor in USS *Seawolf,* SS (N) 575, with a pressurized water reactor and wants to make design changes on the experimental submarine USS *Albacore,* AG(SS) 569.

Present planning also calls for three LSDs to become seaplane tenders and one Mariner hull to be converted for attack transport duties.

AS NEW SHIPS are commissioned they will replace the older types on a ship-for-ship ratio. This is due to the higher cost and the superior combat capabilities of our new carriers, missile ships and other units. At present we lead the world in utilization of nuclear propulsion and our guided missile potential is increasing at a rapid rate.

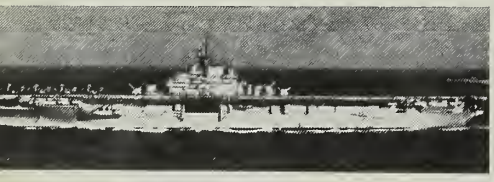
In the words of the Chief of the Bureau of Ships, "The 1959 program will enable us to meet our most urgent requirements and to continue to introduce the most recently developed weapons systems into the Fleet." To find the action which proves these words, take a look at the submarine forces.

The Navy's third atomic sub, USS *Skate,* SS(N) 578, completed her

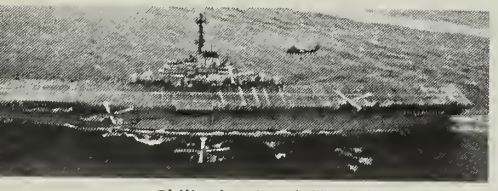
NAVYMEN MANNING new and converted ships are well trained to handle latest equipment. Here, Navymen stand formation on *USS Forrestal* (CVA 59).

USS *Princeton* (CVS 37)

USS *Boxer* (CVS 21)

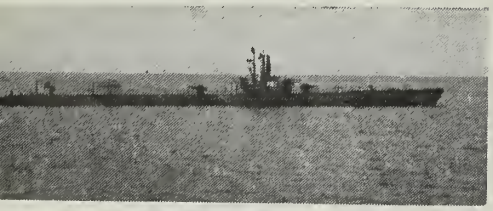


USS *Leyte* (CVS 32)



USS *Philippine Sea* (CVS 47)

USS *Spinax* (SSR 489)

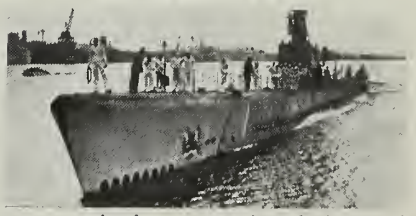


shakedown with flying colors. She set off from New London, Conn., and 203 hours later arrived off Portsmouth, England—making the entire trip while submerged. Returning, the $31 million underseas craft submerged off Lizard Head, at the entrance to the English Channel, and 173 hours later surfaced near Block Island. Both trips are claimed as record runs for submerged submarines and *Skate* was said to have performed perfectly during the sustained high-speed runs.

Shortly after return, it was announced that *Skate* would join USS *Nautilus*, SS(N) 571, and *Seawolf*, SS(N) 575, the first nuclear submarine division in U.S. naval history. The three boats were assigned to SubDiv 102 at New London. The other three boats now in the six-ship division are the diesel-powered USS *Hardhead* (SS 365), *Bang* (SS 385) and *Halfbeak* (SS 352). The three nuclear boats replaced USS *Croaker* (SSK 246) and *Angler* (SSK 240) which were reassigned to SubDiv 81. As more of the atomic subs join the Atlantic Fleet they will be incorporated into this division.

Nautilus is training with the Pacific Fleet again this summer. She left for her second visit to PacFlt in mid-spring and will spend two months operating with West Coast units. None of the atomic subs has been assigned to Pacific Fleet as yet.

USS *Archerfish* (SS 311)



USS *Swordfish*, SS(N), 579

SWORDFISH will join Fleet in fall.

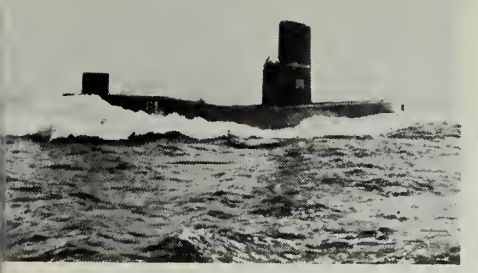
Seawolf, recently named as flagship for Commander Submarine Force, Atlantic Fleet, features a new secret weapon—a shocking pink exercise machine. The device was brought on board to provide exercise for crew members who have to go for weeks at a time without exercise. Although featuring more room than World War II type subs, the nuclear boats still do not have enough space for calisthenics or athletic contests. In addition, they remain at sea for longer periods and remain submerged longer. These periods of inactivity and the heaps of good food for which the "Silent Service" is famous, lend importance to the electric exercise device. *PINK*??????

USS *Grayback*, (SSG 574), flying the battle-gloried colors of her WW II predecessor lost on its tenth war patrol, was commissioned early this year at Mare Island Naval Shipyard. The diesel-powered guided missile sub is with the Pacific Fleet.

Grayback is the first submarine capable of firing the supersonic *Regulus II* missile. This bird can carry its nuclear warhead over a range of more than 1000 miles at speeds of Mach 2 or twice the speed of sound. The missiles are carried in twin-cylinder-shaped hangars faired into the submarine's upper hull forward. The launching platform is aft of hangars, but forward of sail.

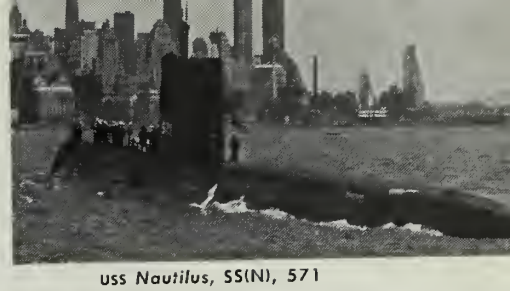
USS *Aspro* (SS 309)

TAKING A REST — Carriers and subs pictured above are headed for the Atlantic and Pacific Reserve Fleets.



USS Seawolf, SS(N), 575

USS Sargo, SS(N), 583



USS Nautilus, SS(N), 571

GROWING FAST—Navy's ever expanding Fleet of nuclear-powered subs is shown here. These are already in the water and more A-subs are on the way.

The 320-foot long submarine was originally scheduled for launching in 1956, but while still on the ways it was decided to convert her for guided missile duties. Her hull was cut in two, and approximately 50 feet added to accommodate the missile hangars.

Less than a month after *Grayback* was commissioned, *Growler*, the future SSG 577, was launched at the Portsmouth Naval Shipyard. Also diesel-powered, *Growler* is only 317-feet long and features the same hangar arrangement as *Grayback*. These two were the only two diesel-powered submarines designed by the Navy for *Regulus II*, but the underseas Fleet is looking forward to the addition of the nuclear-powered guided missile sub *Halibut*, SS(N) 587, which will be launched in December and *Permit*, SSG(N) 594, which has not as yet been laid down. Both are designed for *Regulus II*.

It might be mentioned here that *Growler* was the 124th submarine built at the Portsmouth yard. Four others are under construction there, including three nuclear boats. In contrast, *Grayback* was the first submarine completely blue-printed at Mare Island and 27th built there.

From other news concerning missiles and subs comes word that work has begun on the three Fleet ballistic missile boats ordered early this year. One is being built at Mare Island and the other two at New London, Conn. Generally dynamic in appearance, the whale-shaped hull (380 feet-long) will contain launching racks for a number of the 1500-mile *Polaris* missiles that may be fired while the submarine is submerged.

THE *Polaris* weapons system will be operational by October 1960 according to the Chief of Naval Operations. The system includes not only the missile, but also its nuclear-powered submarine launching platform and trained crews.

The *Polaris* boats will be equipped with SINS, the Navy's revolutionary new navigation system, and with new stabilizing and electronics equipment. Orders for the reactors for the three ships have been placed at a cost of more than $6 million.

The latest nuclear sub to be launched is USS *Skipjack*, SS(N) 585. It is patterned after the design of the high performance *Albacore* (whale-shaped hull, single screw), but has its diving planes mounted on the sail, like wings. *Skipback* will displace 2850 tons. The keels for four sisterships, *Sculpin*, SS(N) 590; *Shark*, SS(N) 591; *Snook*, SS(N) 592; and *Thresher*, SS(N) 593, were laid early this year along with the plates for the smaller (2490 tons) *Tullibee*, SS(N) 597, slated to go down in early summer.

An even smaller sub, the 2310-ton *Seadragon*, SS(N) 584, is scheduled for launching in September, one month before its sisterships *Swordfish*, SS(N) 579, and *Sargo*, SS(N) 583, are scheduled for commissioning.

Three diesel-powered 1690-ton attack subs are being launched this year. They are *Barbel* (SS 580) launched in July, *Blueback* (SS 581) and *Bonefish* (SS 582). All are members of a new fast attack class based on the *Albacore* design.

USS Skate, SS(N), 578

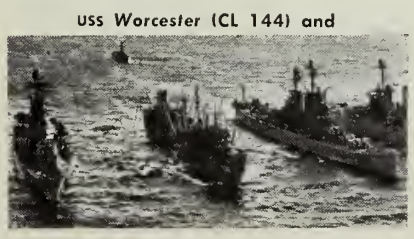
Another fast attack submarine (*Tang* class), USS *Gudgeon*, (SS 567), flagship for the Pacific Fleet Submarine Force, recently completed the first around-the-world cruise to be made by a U.S. submarine. She left her Pearl Harbor homeport last year for a routine deployment in the Far East. Eight months later she returned after having covered 26,859 miles, visited 12 countries, and sailed in three oceans and numerous seas.

During the cruise which carried *Gudgeon* away from normal supply points and repair bases, every square inch of the boat was packed with food and spare parts. Fresh canned milk, for example, was carried in the torpedo tubes. The globe-trotting sub came home to a welcome supplied by dancing hula girls, a helicopter dropping leis, and a fireboat

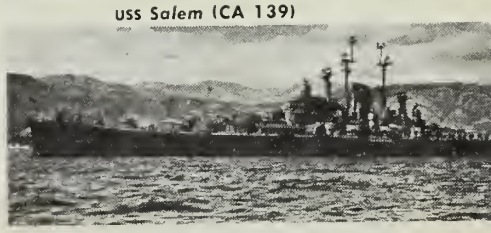
USS Roanoke (CL 145)

USS Tilefish (SS 307)

USS Worcester (CL 144) and



USS Salem (CA 139)



TIME TO RETIRE — New and converted ships will take over for these ships that are soon to be mothballed.

TERRIER TWINS—The Fleet's first two guided missile cruisers cruise side by side in Atlantic. More guided missile cruisers will soon be joining these ships.

spewing water to the accompaniment of a Navy band.

A QUESTION has been raised that indicates the activity of one Pacific Fleet boat. USS *Sabalo* (SS 302) made a hand dive in 64 seconds. The dive was made from one engine standard speed and except for the CO, XO and control room watch, no one aboard had prior knowledge that the dive would be by hand. Is this a new record for this evolution?

USS *Perch,* AP(SS) 313, took part early this year in tests off the shores of Camp Pendleton, Calif. Five HOK1 helicopters operating from the deck of *Perch,* carried 75 members of C Company, First Reconnaissance Battalion, 400 yards to the beach in 25 sorties. The choppers were from Marine Observation Squadron Six, whose pilots made 170 landings on the *Perch* during two days of tests.

If you are wondering where *Perch* carried the helicopters, it didn't. In practice the choppers would come in from a carrier lying far out at sea. They could refuel on the submarine and head in to drop the scouts off in the surf.

Over on the Atlantic side three New London subs have gone south to find new homeports. USS *Atule* (SS 403), *Grenadier* (SS 525), and *Tirante* (SS 420) are now operating from Key West, Fla. They replaced submarines that are to be decommissioned, maintaining uniform strength throughout the LantFlt force.

A 312-foot Fleet snorkel submarine has been loaned to the Royal Hellenic Navy (Greece) under provisions of the Mutual Defense Assistance Program. Formerly USS *Jack* (SS 259), the submarine was commissioned His Hellenic Majesty's Ship *Amphitriti. Jack* ranked ninth among U.S. undersea ships in enemy tonnage sunk during World War II.

This is the second vessel transferred to Greece by the U.S. *Lapon* (SS 260) made the switch last year and was christened HHMS *Poseidon.*

IN A RAPID switch from the "black shoe" to the "brown shoe" Navy we find the big news in the laying of the keel for the atomic-powered aircraft carrier *Enterprise.* Powered by eight reactors, the new "Big E" will be able to steam for more than two years before replenishing her nuclear fuel supply.

Enterprise, seventh ship to bear the name, will be about 1100 feet long and will displace 85,000 tons. She will cost some $312 million and will be armed with guided missiles for protection against air attack and her planes will be able to play an important role in the limited war as well as the all-out atomic conflict.

CVA 62, *Independence,* launched in June (see page 59) will join sisterships already serving with the Fleet. She will feature conventional armament for air defense purposes, but *Kitty Hawk* (CVA 63) and *Constellation* (CVA 64) will be armed with *Terrier* missiles.

The surface-to-air *Terrier* missile has a range of about 10 miles and rides a radar beam to its target. The 15-foot weapon is loaded onto its launcher, trained, elevated and fired by an automatic system.

Undergoing conversion at the Naval Shipyard, San Francisco, USS *Oriskany* (CVA 34), and at Puget Sound, *Coral Sea* (CVA 43). *Oriskany,* last of the *Essex*-class carriers to receive the modernization, will be recommissioned in 1959. *Coral Sea,* third and last ship in the *Midway*-class to be converted will quit the yard in early 1960.

SPEAKING OF SHIPS leaving the yard brings us to USS *Lexington* (CVA 16), which quit the yard in Bremerton this spring after a routine overhaul. Some 96,000 man-days of labor went into the upkeep which included a complete overhaul of the main propulsion system, some alterations and a general scrub down. She also was in Pudget Sound Naval Shipyard three years ago undergoing modernization. Recommissioned in August 1955, she made two tours to the Far East before returning to the yard for the current overhaul.

USS *Yorktown* (CVS 10) was also at Puget Sound until early this year, for overhaul. Work on her lasted four months and accounted for some 68,000 man-days of labor.

In need of some repair work earlier this year was the MSTS carrier USS *Corregidor* (T-CVU 58) which suffered a cracked hull during an Atlantic storm. Some water entered the 487-foot-long carrier which was launched in 1943, but she arrived safe in port.

Tinian (CVHE 123) was also tossed about by a storm. The ocean-going tug USS *Yuma* (ATF 94) was towing the mothballed carrier off the West Coast when rough seas snapped the tow lines. But again the ship reached the safety of sheltered waters without further incident.

A storm also delayed the return of USS *Kearsarge* (CVA 33), coming home after an eight-month tour of duty with the Seventh Fleet. Speaking of aircraft carriers, USS *Ranger* (CVA 61) reported for duty with Pacific Fleet this summer. She completed her shakedown cruise in the Caribbean before last Christmas and went to Norfolk Naval Shipyard for routine overhaul in February.

USS *Valley Forge* (CVS 45) has become the permanent flagship for a new antisubmarine task group. Eight DDEs from Escort Destroyer Squadron 28 have been assigned to the force, designated Force Alfa. The DDEs are USS *Robert A. Owens* (DDE 827), *Waller* (DDE 466), *Conway* (DDE 507), *Cony* (DDE 508), *Eaton* (DDE 510), *Bache*

(DDE 470), *Beale* (DDE 471), and *Murray* (DDE 576).

Ships and air units will be assigned to the Force for periods of 18 months to obtain the maximum benefits from constant training in new tactics and weapons.

SPEAKING OF DESTROYER types, the Pacific Fleet will receive seven brand new DDs by mid-1959. They will join CruDesPac in the following order as they are commissioned: *Hull* (DD 945), *Edson* (DD 946), *Morton* (DD 948), *Richard S. Edwards* (DD 950), *Parsons* (DD 949), *Somers* (DD 947), and *Turner Joy* (DD 951).

All are of the 2800-ton *Forrest Sherman* class. Another ship in the class, USS *Mullinnix* (DD 944), was commissioned in March.

One of two DEs at present under construction (two others, DE 1035 and 1036, have been suspended) is scheduled for commissioning in November. It is *Claud Jones* (DE 1033), sistership to the 1300-ton USS *Hooper* (DE 1026) which was commissioned in March.

Five guided missile frigates will be launched this year, but none of the 10 under construction will be completed until late 1959. The keels for six guided missile destroyers will be laid this year, but as you can see on the chart (see box) none of 13 authorized will be completed until 1960.

Several other destroyer Force items that crossed the ALL HANDS news desk told of the tender USS *Dixie* (AD 14) returning from a seven-month tour in the Far East early this year. She relieved USS *Piedmont* (AD 17) at Kobe, Japan, and was later relieved by USS *Prairie* (AD 15). Also, the former *Anthony* (DD 515) was transferred to the Republic of West Germany at Charleston, S.C., early this year. She became the first DD to join this NATO nation's Navy and was christened Z-1.

DesDiv 51 returned to San Diego recently after a seven-month Far East tour with the Seventh Fleet. The division includes USS *Gurke* (DD 783), *Rowan* (DD 782), *Henderson* (DD 785), and *Southerland* (DDR 743). The later two took part in the relief mission to Ceylon described in the May issue of ALL HANDS.

Rowan and *Gurke* were plane guards for the carrier *Kearsarge* during her cruises for the Japanese royal family and other dignitaries. *Gurke* also represented the U.S. in an International Baseball Tournament at Hong Kong, defeating the Filipino favorites, 26-7.

USS *Stembel* (DD 644)—veteran of 10 Pacific campaigns, credited with destroying four enemy aircraft and sinking eight enemy ships and rescuer of nearly 400 officers and men during World War II—has been inactivated for the second time. The Korean conflict saw *Stembel* at Kojo

SHIPS UNDER CONSTRUCTION AND CONVERSION
DELIVERY YEAR

Type	Total	1958	1959	1960	1961
AE Ammunition Ship	3		3		
T-AKD Cargo Ship Dock	1	1			
CG(N) Nuclear Guided Missile Cruiser	1			1	
CVA Attack Aircraft Cruiser	3		1	1	1
CVA(N) Nuclear Attack Aircraft Carrier	1				1
DD Destroyer	7	4	3		
DDG Guided Missile Destroyer	13			7	6
DE Escort Vessel	4*	1	3		
DLG Guided Missile Frigate	10		2	6	2
LCU Utility Landing Craft	10	3	7		
LPH Amphibious Assault Ship	1	(No Completion Date Set)			
LST Tank Landing Ship	4	4			
MSC Minesweeper, Coastal	21	4	17		
MSI Minesweeper, Inshore	2	1	1		
MSO Minesweeper, Ocean	5	5			
SS Submarine	3	1	2		
SS(N) Nuclear Submarine 2310 tons	3	2	1		
SS(N) Nuclear Submarine 2850 tons	7	1		6	
SS(N) Nuclear Submarine 2490 tons	1			1	
SSG Guided Missile Submarine	2	2			
SSG(N) Nuclear Guided Missile Submarine	2		1		1
SSR(N) Nuclear Radar Picket Submarine	1		1		
SS(N) FBM Fleet Ballistic Missile Submarine	3			3 (est.)	
YP Patrol Vessel	9	9			
TOTALS	117	38	42	25	11

CONVERSIONS

AV Seaplane Tender	1		1		
CG Guided Missile Cruiser (Talos)	3*	(No Completion Date Set)			
CLG Guided Missile Light Cruiser (Talos)	3	1	2		
CLG Guided Missile Light Cruiser (Terrier)	3		2	1	
CVA Attack Aircraft Carrier	2		1	1	
LPH Amphibious Assault Ship	1*			1	
EAG Miscellaneous	1	1			
T-AGS Surveying Ship	3	3			
APA Attack Transport	1	1			
YAGR Ocean Radar Station Ship	4	4			
TOTALS	22	10	6	3	0

* The Navy recently announced that work on the following ships would be suspended or not begun because of budget limitations:

- *Charles Berry* (DE 1035), *McMorris* (DE 1036): Both 20.5 per cent completed; originally scheduled for completion in 1959.
- *Block Island* (LPH 1): Two per cent converted; originally scheduled for completion in 1960.
- *Fall River* (CG 12), *Chicago* (CG 11): No completion date had been set for these ships which were announced in late 1957.
- Four DLGS: Contracts for these unnamed ships had not been awarded.

SHIP INACTIVATIONS, F.Y. 1959

Name	Homeport	Inactivation Date
PACIFIC RESERVE FLEET		
Boxer (CVS 21)	San Diego	Oct 1958
Princeton (CVS 37)	Long Beach	Mar 1959
Philippine Sea (CVS 47)	Long Beach	Jul 1958
Columbus (CA 74)	Long Beach	Feb 1959
Worcester (CL 144)	Long Beach	Sep 1958
Roanoke (CL 145)	Long Beach	July 1958
Tilefish (SS 307)	San Diego	July 1958
Aspro (SS 309)	San Diego	Mar 1959
Bonita (SSK 3)	San Diego	Oct 1958
Spinax (SSR 489)	San Diego	Mar 1959
Yarnall (DD 541)	San Diego	July 1958
Spangler (DE 696)	San Francisco	July 1958
Charles E. Brannon (DE 446)	Tacoma	Jan 1959
Leray Wilson (DE 414)	San Diego	Dec 1958
Hanna (DE 449)	Long Beach	July 1958
Silverstein (DE 534)	Pearl Harbor	Nov 1958
George (DE 697)	San Francisco	July 1958
Ulvert M. Moore (DE 442)	San Diego	July 1958
Goss (DE 444)	Long Beach	July 1958
Gilligan (DE 508)	Portland	Jan 1959
Kenneth Whiting (AV 14)	Whidbey Island	July 1958
Sussex (AK 213)	Pearl Harbor	Oct 1958
Chara (AKA 58)	Mare Island	Dec 1958
Karin (AF 33)	Pearl Harbor	Oct 1958
Merapi (AF 38)	Pearl Harbor	Oct 1958
ATLANTIC RESERVE FLEET		
Leyte (CVS 32)	Newport	Not Firm
Salem (CA 139)	Norfolk	July 1958
Balao (SS 285)	Key West	July 1958
Crevalle (SS 291)	New London	Dec 1958
Archerfish (SS 311)	Key West	Dec 1958
Requin (SSR 481)	Norfolk	Nov 1958
Pompon (SSR 267)	Norfolk	Dec 1958
Ray (SSR 271)	Norfolk	July 1958
Redfin (SSR 272)	Norfolk	Mar 1959
Kenneth M. Willett (DE 354)	New Orleans	Dec 1958
Jasper (PC 486)	Balboa	Feb 1959
Chadron (PC 564)	New London	Feb 1959
Tooele (PC 572)	Newport	Feb 1959
Malvern (PC 580)	Key West	Feb 1959
Manville (PC 581)	Newport	Feb 1959
Milledgeville (PC 1263)	Key West	Feb 1959
Weatherford (PC 618)	Key West	Feb 1959
Crestview (PCE 895)	Key West	Mar 1959
Fairview (PCER 850)	New London	Mar 1959
Bowers (APD 40)	Charleston	Oct 1958
Liddle (APD 60)	New Orleans	Nov 1958
Horace A. Bass (APD 124)	Philadelphia	Nov 1958
Mauna Loa (AE 8)	New York	Sep 1958

and Wonsan conducting shore bombardment, and her name has long been familiar with the Seventh Fleet. During her last deployment she earned a Gunnery "E" for her Main Battery Director and each of her five-inch mounts, and added a hashmark to the Torpedo Mount "E." During her 124.3 days at sea she steamed 40,558 nautical miles and only spent 42.7 days in port.

THE CRUISER FORCE which will be strengthened by *Galveston* and her two *Talos*-missile-armed sisters, is looking forward to the addition of CLGs 6, 7, and 8, *Providence*, *Springfield* and *Topeka*, which will carry an improved model of the *Terrier*. *Topeka* will be completed in early 1960, but the other two should join the Fleet in late '59.

The heavy cruiser USS *Albany* (CA 123) was taken from the active Fleet for conversion to CG status. The *Chicago* (CA 136) and *Fall River* (CA 131), both in the inactive fleet, were to have received the *Talos* conversion, but were suspended due to budget limitations. The *Albany* will receive both *Talos* and *Tartar* ship-to-air missile armament with launchers replacing both the forward and after 8-inch mounts. *Tartar* missiles will replace the secondary battery and the *Talos* will be the main battery substitute.

Providence, which is undergoing the face-lifting at the Boston Naval Shipyard, is better than 30 per cent complete. All superstructure has been removed and a missile house is being prefabricated ashore. When completed she will have *Terrier* missile-launchers aft, will feature a new and lower superstructure, and new flagship compartmentation below.

A guided missile cruiser already in commission, USS *Canberra* (CAG 2) recently completed a six-month cruise in the Med with the Sixth Fleet. Carrying *Terrier* missiles, her power was added to the Med Fleet after she participated in NATO maneuvers.

In other cruiser news we have learned that the former USS *Brooklyn* (CL 40) has arrived at the place where it was built and commissioned, the N.Y. Naval Shipyard, but this time the cruiser bears the name *O'Higgins* and sails under the flag of Chile. The cruiser is here for a five-month overhaul.

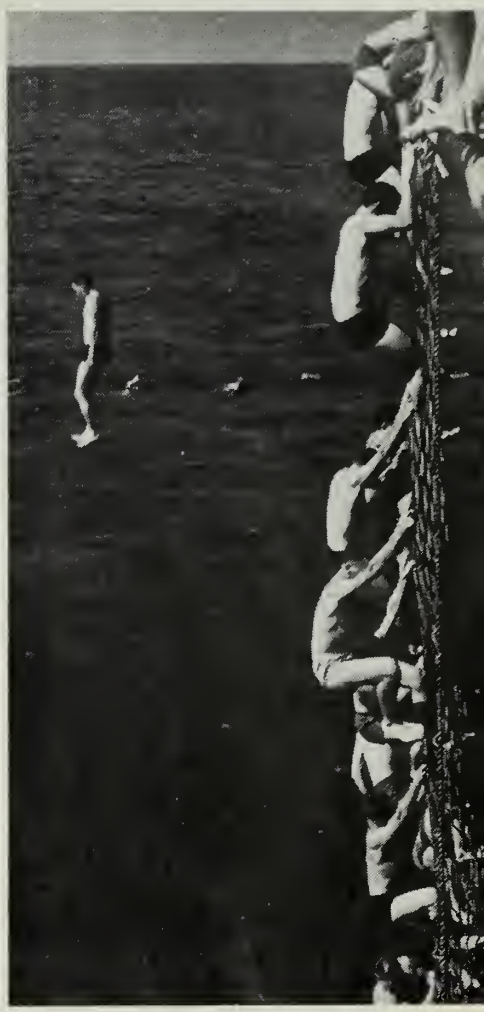
IN OTHER SHIP NEWS, the Fleet oiler USS *Mississinewa* (AO 144) has undergone conversion for duties as a flagship. A flag bridge has been added along with a helicopter deck, additional berthing and messing facilities, and other gear to make the ship suitable for flagship service with Commander Service Force, Sixth Fleet. Her homeport has been shifted from Norfolk to Naples, Italy.

From the amphibs comes word that the LSTs USS *Vernon County* (LST 1161), *Westchester County* (LST 1167), *Washoe County* (LST 1165), *Washtenaw County* (LST 1166), and *Windham County* (LST 1170) have been transferred to the West Coast to make room for six new 3500-ton landing ships. The USS *York County* (LST 1175) was the first of the new class to join the Atlantic Fleet. She was followed by USS *Grant County* (LST 1174), *Graham County* (LST 1176) and *De Soto County* (LST 1171). *Lorain County* (LST 1177) is scheduled for commissioning in August and *Wood County* (LST 1178) will be finished in December.

Other amphibious ships in the news were finishing tours of duty. USS *Pocono* (AGC 16), *Waldo County* (LST 1163) and *Terrebonne Parish* (LST 1156) all completed tours of duty with the Sixth Fleet. On the other side of CONUS, 12 members of Amphibious Squadron One returned home after eight months in the Western Pacific where they took part in joint U.S.-Filipino landing operations. Flagship for the group was USS *Henrico* (APA 45).

The coastal minesweeper USS *Spoonbill* (MSC 202) relieved the coastal minehunter USS *Waxbill* (MHC 50) at the San Francisco Harbor Defense Unit. *Waxbill* has been engaged in channel clearance and conditioning. She is being inactivated.

—William Prosser, JOC, USN.



Swim Call in the Med

THE WORLD'S BIGGEST bathtub is standard plumbing for USS *Randolph* sailors.

Operating with the Sixth Fleet in the Mediterranean, USS *Randolph* (CVA 15) doesn't need to turn a faucet to give her crew 3,000 salty baths. She justs stops, lowers elevator number three, and Operation Swim Call is under way.

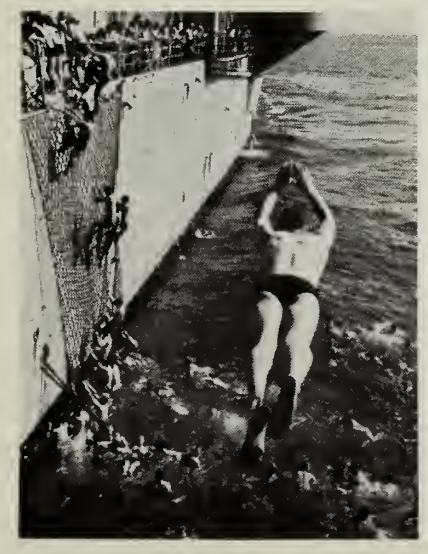
Diving over the side of a carrier is hardly the whole story on swimming in the open sea. The shark menace is minor in the Med but even so, no chances are taken. Shark repellant is spread from two motor whale boats along the rim of the swim area by ship's medical department corpsmen. If sharks turn up, lifeguards in the boats pass the word through their bull horns and the swim area is secured.

The carrier's Operations Department stations signalmen with equipment in each boat and details lookouts with binoculars and telephone sets at strategic points along the flight deck and catwalks. During the entire operation, *Randolph's* helicopter stands ready if needed.

First step in making ready to hit the drink gets under way when a safety line is rigged to enclose the swim area. Next, cargo nets are swung over the side, staging is fixed for diving and the lifeguards, under the supervision of the ship's athletic officer, take their stations.

Finally the bugle sounds "Swim Call" and 3,000 carrier men dive into the blue waters of their Mediterranean swimming hole.

—Charles Wright, SN, USNR.
—Photos by M. Shuman, PHG3, USN.



Roundup on Navy's Guided

HERE'S THE LATEST available picture of the Navy's missile program. No matter when you read this, some of the information will be outdated but, in general, the story is something like this:

Today, the Navy has operational missiles in the four major categories: ship-to-air, ship-to-surface, air-to-surface and air-to-air. In addition, *Polaris*, the Navy's 1500-mile Fleet Ballistic Missile, is being developed for submarine launching from beneath the oceans' surface.

Recent History—The first guided missile ever launched in wartime against an enemy was a U. S. Navy weapon. It was a small drone airplane carrying a 2000-pound bomb which saw limited service in the Pacific in 1943 and 1944 (see ALL HANDS' Guided Missile Issue, March 1957). From that beginning, the Navy's program has grown into its present family of missiles and rockets.

Navy scientists were greatly impressed by the potential displayed during World War II by German jet and rocket weapons. Adopting and improving on German designs, the Navy first developed the *Loon* (a submarine-launched missile similar to the "buzz bomb") and the *Viking* (a rocket similar to the German V-2) in the early years after the war.

Another missile program, underway at the same time as these developments, was the once highly secret *Bumblebee* project. This program of research and development has been conducted for BuOrd by the Applied Physics Laboratory of the Johns Hopkins University for the past 14 years. The program was originally established in 1944 to find an improved air defense system to meet the threat of the Japanese kamikaze attacks. Realizing the growing power of air attacks at all altitudes, Johns Hopkins was assigned a research and development program which would result in an antiaircraft missile of high performance.

From these two programs has come the Navy's concept of developing a "weapons system," rather than a single weapon. For shipboard use, this involves guidance, handling, launching and storage equipment, as well as the missile itself. Here are some of the problems involved in converting ships for missile launching:

- Whether fixed or portable, the launchers must be stable and must grip missiles firmly to prevent damage and yet give split-second release at the time of firing.
- All fuels used by missiles are fire hazards and some are poisonous. Several explosives are handled in one magazine. This means that new arrangements and handling procedures must be worked out.
- The deck below the launcher must be able to withstand the heat of the jet or rocket blast. If an accident or misfire occurs, the ship must be capable of absorbing the shock.

The Navy's first ship converted for missile firing was the seaplane tender USS *Norton Sound* (AVM 1). The first missile she fired was *Loon*. *Aerobee* (a high-altitude research rocket), *Terrier* and *Regulus* followed. A *Viking* was fired from her main deck in May 1950, reaching an altitude of 106 miles, a record for shipboard launching. It carried 1000

HEADED FOR THE FLEET—*Regulus II* blasts off toward target during test firing. *Above:* Relatively simple and inexpensive *Sidewinder* is with the Fleet.

pounds of cosmic ray instrumentation as payload.

Information and innovations from *Norton Sound* have been incorporated into the systems now going aboard the Navy cruisers, frigates and submarines having missile capability. From these studies have come much of the basic research which is incorporated into the following Navy missiles:

SIDEWINDER—An air-to-air missile. Named after the desert rattlesnake of the same name, *Sidewinder* is guided by a heat-seeking or infrared device, and seeks its target by homing on the heat of the aircraft. Nine feet long and weighing about 155 pounds, the supersonic missile is designed to destroy high-performance aircraft from sea level to altitudes above 50,000 feet. With less than 24 moving parts and no more electronic components than an ordinary table radio, it requires no specialized technical training to handle and assemble. It is very inexpensive—relatively speaking.

Missiles

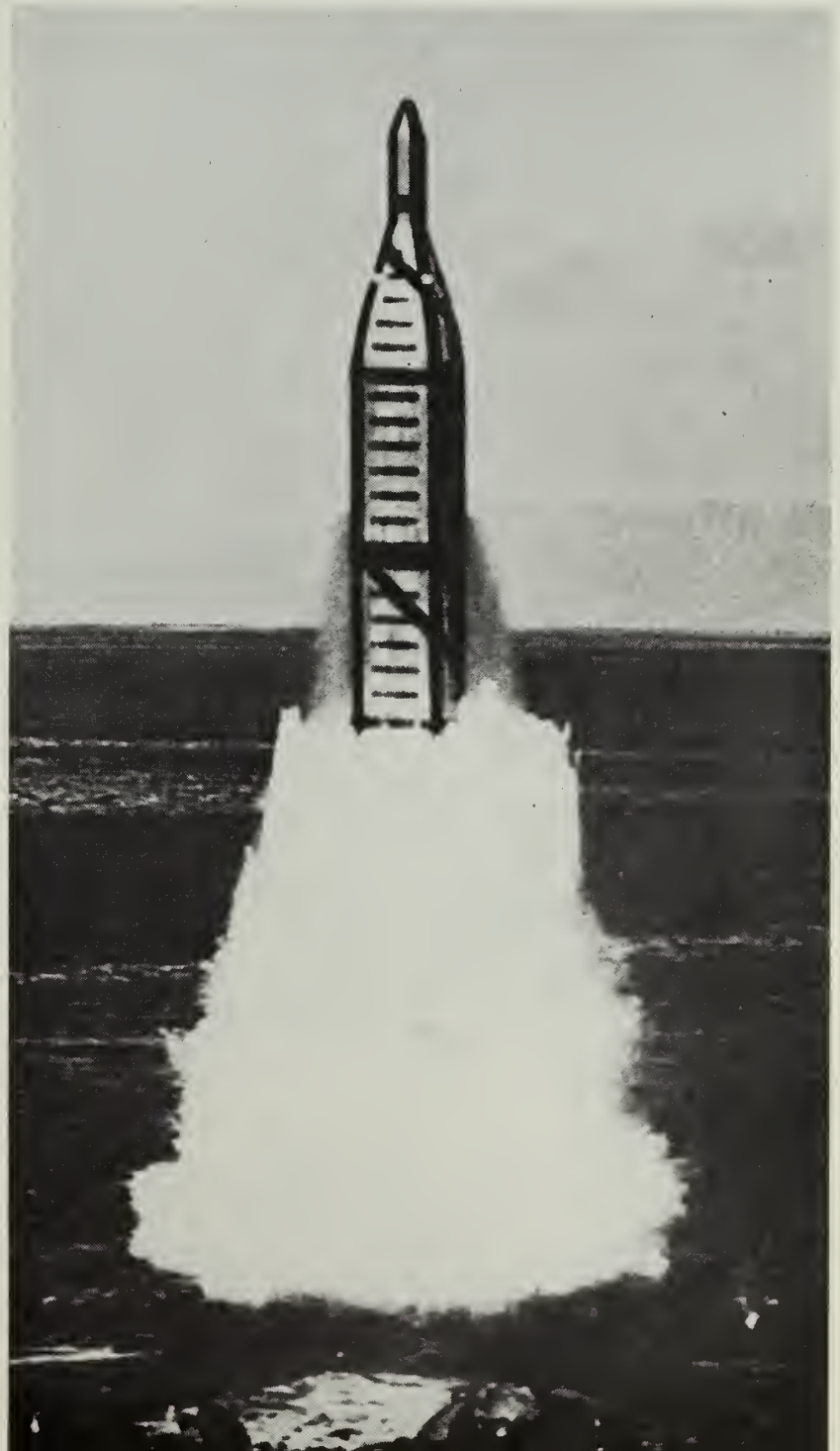
It is now the primary airborne missile used by squadrons in the Sixth Fleet in the Mediterranean and the Seventh Fleet in the Western Pacific. Basically a defensive weapon, it permits defending fighters to knock down the fastest known aircraft even when miles away. It has also been adopted by the Air Force for air defense of the continental United States.

SPARROW I—An air-to-air missile which became operational in the spring of 1956. This 12-foot long, 300-pound missile reaches speeds of 1500 miles per hour within seconds after launching. It is powered by a solid propellant rocket motor, and Navy planes can carry two to four of them. After being fired either singly or in salvos, it is guided to its target by a beam transmitted by the launching aircraft's radar. Guidance signals deflect the missile's wings and direct it to intercept the target even under evasive action. It provides effective attack against high and low altitude enemy jet bombers and fighters. (It has been phased out of production.)

SPARROW II—Another air-to-air missile, this one has only developed as a part of the Navy's development program and is not intended for Fleet use. It will be produced in Canada for use by the Royal Canadian Air Force.

SPARROW III—This is the air-to-air missile which has been called "the most advanced weapon of our time." It is an improvement over the already operational *Sparrow I*, and will replace that missile in Fleet use. *Sparrow III* is 12 feet long, weighs about 350 pounds and, like its predecessor, reaches 1500 miles per hour. It is an all-weather missile which can be fired above or through clouds with accuracy. Navy fighters can carry two to four *Sparrows* and all-weather fighters now with the Fleet can carry *Sparrow III*. Increasing numbers of Navy planes will see future Fleet service with this weapon.

PETREL—Although operational at the present time, this air-to-surface weapon is now obsolete and is being phased out of production. However, for the record, it is 24 feet long, has



POLARIS, Navy's IRBM designed to be fired from a submerged submarine blasts from below during test firing.

a wingspan of 13 feet and weighs 3800 pounds. With a radar homing guidance system, this turbo-jet missile has air-to-underwater capabilities for use against enemy submarines, as well as the ability to destroy enemy surface ships from launching points outside the antiaircraft defenses of the targets.

BULLPUP—This is also an air-to-surface missile, but much different from *Petrel*. It is a tactical guided missile designed primarily for use against small targets in support of ground troops. Designed for carrier-based Navy planes and shore-based Marine planes, *Bullpup* is 11 feet long, weighs about 540 pounds, and is scheduled to become operational this year.

Its control surfaces are located in the forward part of the missile and the stabilizing surfaces are located aft. It has a self-contained navigational system and is powered by a solid-propellant rocket at supersonic speeds. It has a 15,000-foot range and a speed of approximately Mach 2.

Bullpup is relatively inexpensive, simple in design and highly accurate. In one recent test, a Navy pilot who launched the missile in his first try hit a four-inch square target two miles away. A non-nuclear weapon, the missile is designed for use against comparatively small targets — pill-boxes, tanks, truck convoys, bridges, railroad tracks and the like. It does not require high-priced test equipment or especially trained maintenance personnel.

TERRIER—Is the all weather ship-to-air missile which is making the Navy happy. The first operational missile developed by the *Bumblebee* program, this supersonic weapon can strike at aircraft 10 miles away and at altitudes above the range of conventional antiaircraft guns. It is about 15 feet long, weighs one and one-half tons, and has a rocket motor which uses a solid propellant.

It is suitable either for shipboard use or beachhead operations with the Marines. Ships which now use the *Terrier* are the guided missile cruisers USS *Boston* (CAG 1) and *Canberra* (CAG 2), and the guided missile destroyer *Gyatt* (DDG 1). In addition, the following ships under construction or conversion will use *Terrier*: The aircraft carriers *Kitty Hawk* (CVA 63) and *Constellation* (CVA 64); the cruisers *Topeka* (CLG 8), *Providence* (CLG 6), and *Springfield* (CLG 7); the nuclear cruiser *Long Beach* CG(N) 9; and the frigates *Farragut* (DLG 6), *Luce* (DLG 7), *Macdonough* (DLG 8), *Coontz* (DLG 9), *King* (DLG 10), *Mahan* (DLG 11), and *Dewey* (DLG 14).

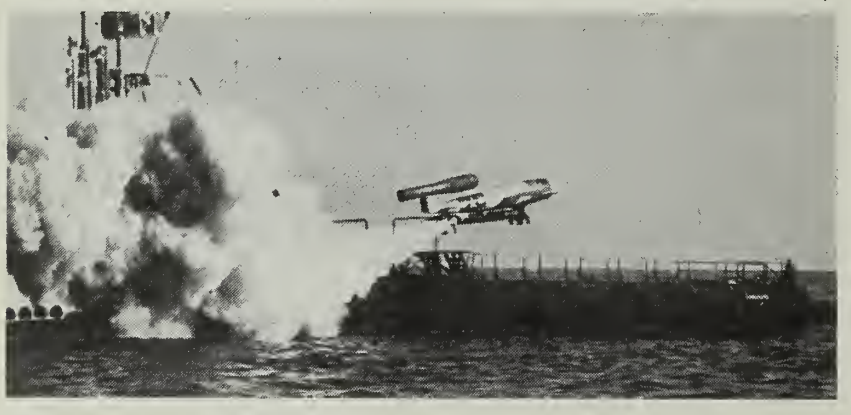
One Marine antiaircraft battalion now uses *Terriers* launched from mobile trailers. This is the only mobile surface-to-air guided missile operated by ground forces today.

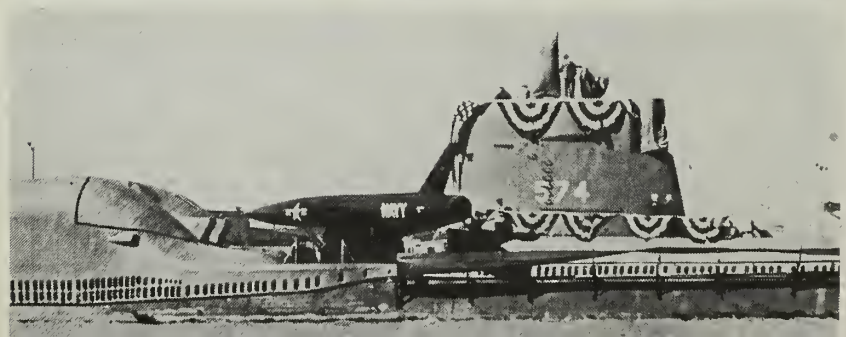
Shipboard *Terriers* are selected automatically from the magazine and loaded on the launcher which is then automatically trained, elevated and fired. The entire operation takes only seconds. "Super-radars" are used to guide the missiles onto their targets. This radar system can control missiles from a single launcher or, as used aboard *Canberra*, is capable of firing missiles at different target groups simultaneously.

TARTAR—This ship-to-air missile is, so to speak, a junior version of *Terrier*. It is designed specifically for use aboard destroyers and other small combatant ships. A solid propellant dual thrust rocket, it has about the same range as its bigger brother. *Tartar* will be installed aboard the guided missile destroyers 2 through 14 for which contracts have been let. It is also slated for use aboard the cruiser *Albany* (CG 10). A contract has been let for pilot line production.

TALOS—The big boy among the ship-to-air missiles, *Talos* is a supersonic missile with advanced two-stage guidance system and nuclear capability. The Navy's longest range weapon designed to bring down attacking enemy aircraft and missiles, it has hit air targets at distances 65 miles or more from the launching site. Twenty feet long, one and one-half tons, it has a ramjet engine

SUB-FIRED missiles have come a long way since *Loon* (top). Now Navy has *Regulus I* (center) and *Regulus II* (bottom) and *Polaris* (page 11) on way.





which develops 40,000 horsepower and reaches speeds greater than Mach 2 within 10 seconds after firing.

USS *Galveston* (CLG 3), which was commissioned in May, is the first ship to carry *Talos* as an operational missile. Two other cruisers, *Little Rock* (CLG 4) and *Oklahoma City* (CLG 5) are being converted to carry *Talos,* and will join the Fleet next year. *Albany* will, in addition to *Tartar,* also be converted to *Talos. Long Beach,* the Navy's first nuclear powered cruiser, will also carry *Talos.*

Talos' two-stage guidance system is worthy of mention. The first, or midcourse stage, carries the missile from launcher to the vicinity of the target. In this stage a beam-riding system similar to the one in *Terrier* is used. Intelligence for the beam-riding phase is received by the missile directly from the launching point where accurate information concerning the presence of hostile targets is available from a variety of sources, such as search and tracking radars.

As *Talos* nears the end of the midcourse phase, the second, or homing system senses that it has found a target and control of the missile is automatically transferred from the beam rider to the homing seeker. Thereafter, the missile flies under control of the seeker which receives close-up information from the target itself until the two objects try to occupy the same point in space.

The Army is also testing *Talos,* and a specially designed *Talos* land-based system at White Sands Proving Ground, New Mexico, for possible use in the Continental Air Defense.

REGULUS I—This ship-to-surface missile, already familiar to many Navymen, was the first operational attack missile to join the Fleet. Resembling a conventional swept-wing jet fighter, this 30-foot-long job flies approximately the speed of sound with a range of about 500 miles. It has nuclear capability, is powered by a ramjet engine, and is guided by an electronic brain. Launching equipment can be installed in a short period on several types of ships at relatively low cost and with only slight modification of the ship itself.

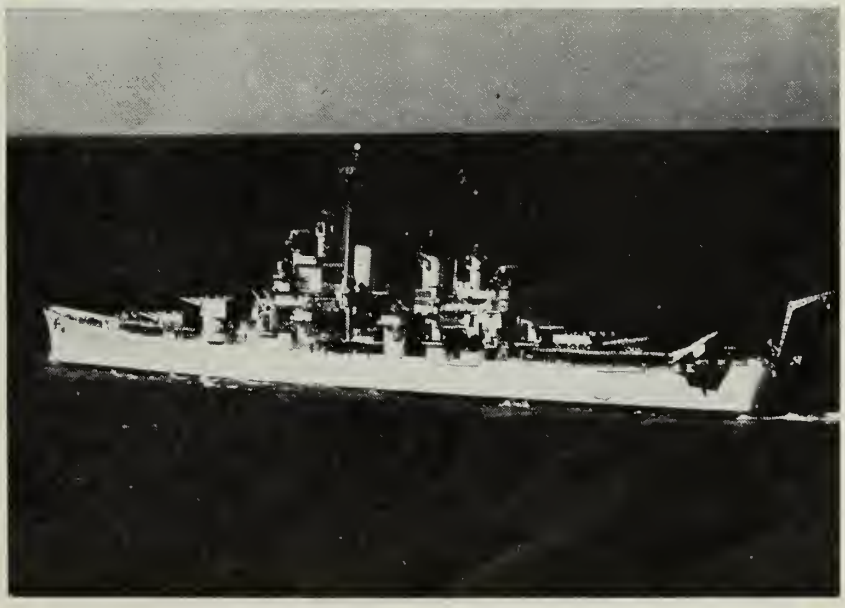
Ships which can fire the missile are: The cruisers *Macon* (CA 132), *Helena,* (CA 75), *Toledo* (CA 133) and *Los Angeles* (CA 135); the submarines *Tunny* (SSG 282) and *Barbero* (SSG 317); and the aircraft carriers *Randolph* (CVA 15), *Hancock* (CVA 19), *Forrestal* (CVA 59) *Saratoga* (CVA 60), *Lake Champlain* (CVS 39), *Franklin D. Roosevelt* (CVA 42), *Lexington* (CVA 16), *Bennington* (CVA 20), *Bon Homme Richard* (CVA 31) and *Shangri-La* (CVA 38).

LOADED—Formation of F3H *Demons* fly with *Sparrow* guided missiles under their wings. The 12-foot air-to-air guided missile can hit 1500 miles per hour.

Tactically, the missile's main target would be against enemy land-based facilities, but it can also be used against ships.

Two versions have been developed. One, a tactical version, is a non-recoverable missile capable of carrying a nuclear warhead. The

NAVY'S FIRST operational attack missile, *Regulus I,* is capable of being fired from many ships. Here is one Regulus packer, *USS Helena* (CAG 75).



ON TARGET—*Talos* surface-to-air guided missile heads home. *Rt: Fury* carries air-to-surface *Bullpup*.

other is a test vehicle with a tricycle landing gear and parachute braking which enables the missile to land undamaged after testing its flight performance. As many as 16 flights have been made by a single *Regulus* —a factor which drastically reduces test and evaluation costs.

REGULUS II—This is also a ship-to-surface missile but is a vast improvement over the earlier version. Designed for shipboard and submarine launching, it is capable of carrying a nuclear warhead faster than twice the speed of sound (which adds up to more than 1300 miles per hour at sea level) for more than 1000 miles. It has an altitude limit of 50,000-plus feet.

This aerodynamic missile is powered by a turbojet engine, with afterburner, is 57 feet long and has a 20-foot wingspan. It is launched with the assistance of a rocket which falls away after the missile is airborne.

It also has a command system as an alternative. With this, the missile can be flown by either ground or aerial control. The recoverable version operates much like *Regulus I*.

Regulus II will arm *Long Beach*, the guided missile submarines *Grayback* (SSG 574), *Growler* (SSG 577) and *Halibut*, SSG(N) 587 and a nuclear submarine requested in 1959 budget.

TRITON—A ship-to-surface missile which was cancelled in 1957. However, it is possible that some of the more desirable features of *Triton* will be incorporated into future missile systems.

POLARIS—The Navy's latest pride and joy. It is also the Navy's Fleet Ballistic Missile but differs radically from the Army's *Jupiter* and the Air Force's *Thor* in many respects. Designed for submerged-submarine launching and applicable to surface ships as well—*Polaris* is a solid-fuel rocket. It is relatively cheap to build, maintain and operate, and is safe to handle and less complicated than liquid propelled systems. It has a large ratio of payload to propellant and can be ready to fire upon short notice.

In the construction of the *Polaris* system, it was necessary for the Navy to whip three difficult problems: How to fire the missile vertically from a submerged submarine and yet hope to strike a target some 1500 miles away; how to establish accurately the missile ship's exact location at the time of firing; how to get sufficient thrust from a solid-propellant motor for delivering long-range ballistic missiles.

Components of *Polaris* have been test-fired recently at Cape Canaveral, Fla., and further tests are being conducted. A converted cargo ship, now *Compass Island* (EAG 153), was commissioned in 1956 to develop the accurate navigational equipment needed for accurate shipboard use of an FBM. The result is the Navys' Ship Inertial Navigation System (SINS), which can position the firing ship with such accuracy that its missiles can strike target areas at great distances—with precision.

The FBM's mission is to provide a truly mobile, concealed nuclear armed system. Construction of three nuclear submarines capable of launching *Polaris* is underway. In addition, the Navy has requested permission to build two more *Polaris* subs in the '59 shipbuilding program. ALL HANDS will keep you posted on further developments.

ALL WEATHER, ship-to-air *Terrier* guided missile has proven itself both seaworthy and accurate. Here, *Terrier* leaves launcher of *USS Boston* (CAG 1).

THE WINNERS—Members of commissary dept., *USS Franklin D. Roosevelt* (CVA 42) pose with Ney Awards Committee.

All-Navy Chefs Take the Cake

IF YOU'RE THE TYPE who likes good food—and who doesn't—you'd better get your request in early for duty on USS *Franklin D. Roosevelt* (CVA 42) or the Naval Station, Guantanamo Bay, Cuba—the ship and station picked as grand prize winners in the seagoing and shore-based categories of the first All-Navy food contest.

And, for your second-choice of duty designed to delight the discriminating diner you might do well to put in for USS *Finch* (DER 328) or Headquarters, Columbia River Group, Pacific Reserve Fleet, Tongue Point, Astoria, Ore. Their General Messes took runner-up honors in the competition to find the finest feeders in the Navy, ashore and afloat.

The winners and runners-up were selected by the Ney Memorial Awards Committee, made up of Naval officers and officials of the Executive Stewards' and Caterers' Association (ES&CA). This month, when the association meets at Grand Rapids, Mich., for its annual convention, representatives of the winning messes are scheduled to receive bronze plaques commemorating their victories. The runners-up will get aluminum plaques, and other leading contenders will receive special certificates for their outstanding food service performance.

The Ney Awards were established as a form of recognition for the Navy's top General Messes. They were named for the late CAPT Edward F. Ney, Supply Corps, USN, who was World War II director of the Subsistence Division, Bureau of Supplies and Accounts.

This year's two winners and two runners-up got the nod over 28 other leading contenders. They were judged under a point system based on efficiency in food preparation, efficiency of serving techniques, sanitation and management.

The seagoing entries in the contest were each picked by a ship-type commander as top-notch mess in his command, and at shore commands messes within geographical areas were nominated to represent their groups. So, picking a winner out of 32 such high-caliber contestants was no easy task. However, by the end of May the field had been whittled down to six finalists—three from afloat and three from shore stations. These six were judged by the awards committee in on-the-spot inspections. Besides *FDR* and *Finch*, the third finalist in the seagoing category was USS *Rigel* (AF 58). The Fleet Air Defense Training Center at Dam Neck, Va., went into the shore-based finals along with Guantanamo Bay and Headquarters, Columbia River Group.

On board *FDR* the contest judges were particularly impressed by her food preparation. Meats had been roasted at low temperatures, which had reduced shrinkage while maintaining flavor, and vegetables were prepared in small or limited quantities and served directly on the line. Other factors that added up points for her were the high standards in the scullery, plus the way the men there had been trained in their jobs The use of proper dishwashing procedures was just one example of the effectiveness of this indoctrination.

The mess at Guantanamo Bay was a winner for its high standards in all phases of food service and management, and especially for the resourcefulness of her commissary crew.

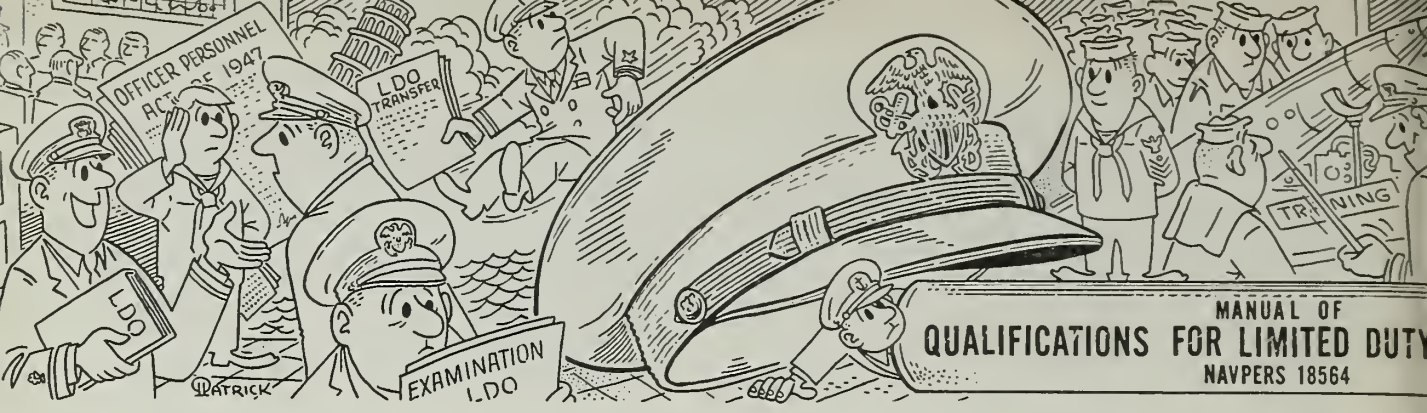
The mess hall has been decorated by a cook-artist with murals of a nautical motif. There are provisions for piping music, and cards with prayers of grace are placed on tables.

Another example of "Gitmo ingenuity" showed up, literally, on the old, locally-made mess tables. These were formerly covered with oilcloth, which required frequent replacement. They have now been resurfaced with a modern, more-durable plastic.

In the scullery, the judges also noted the trays and bowl racks that were self-draining and could be rolled directly to the serving lines. These had been specially designed and built by the station force.

Both *FDR* and Guantanamo Bay are taking their victories in stride—and there is no truth to the rumor that they are changing their nicknames to *FeeDeR* and *Eatmo*.

MESS at Naval Station, Guantanamo, Cuba, won first in All-Navy food contest.



If You're Starting Up the Ladder to LDO,

ALMOST ANY DAY NOW, a new publication—*Manual of Qualifications for Limited Duty Officers* (NavPers 18564)—will appear in the personnel offices of most ships and stations. To many Navymen, it

will be of as great interest as was its companion volume, *Manual of Qualifications for Warrant Officers* (NavPers 18455), which was distributed in 1956.

It will be used by individuals and commands concerned with LDO selection, promotion, allocations, training, distribution, assignment, examination and career planning and development.

As with the WO manual, the new publication will do much to clarify many questions concerning the LDO program.

The limited duty officer is an evolutionary outgrowth of the warrant officer, made necessary by the constant increase in technological and operational developments since the beginning of World War II.

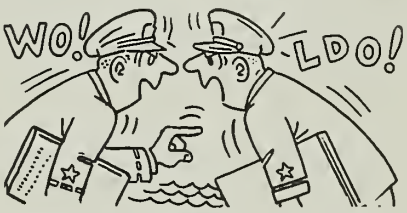
By the end of World War II it became apparent that a new category of commissioned naval officers was needed to supervise technical areas, use their technical talents gained as enlisted personnel, and to provide a climax to the enlisted career pattern.

Admiral Sprague, then Chief of Naval Personnel, summed up this situation when he appeared before the Congressional Armed Services Committee when it was considering the bill which was to become the Officer Personnel Act of 1947.

The Chief of Naval Personnel testified at that time: "One of the outstanding features of this bill is the creation of a new category known as limited duty officer. This will be restricted to the enlisted men and warrant officers who have established outstanding records in the Navy.

"Under this bill, these men would be assured the opportunity for a reasonable commissioned career while, at the same time, enabling the Navy to use their specialized skills and practical knowledge. They will not be required to compete with the general line officer who has always had the advantage of youth and, perhaps, a better formal education.

"For many years, opportunity has



existed for enlisted men to attain commissioned rank without attending the Naval Academy, but in doing so, they have been at a disadvantage in competing with the general line officer of broader qualifications.

"The establishment of limited duty officers is a definite step forward, both in recognition of outstanding enlisted men and in the benefits that will result to the service."

The bill was passed in 1947 and the limited duty officer became a part of the Navy.

First to be designated LDO were temporary officers, ex-enlisted men, of World War II experience. Many of these officers had qualified for general line duty during the war. Almost immediately differences of opinion concerning the status of LDOs appeared.

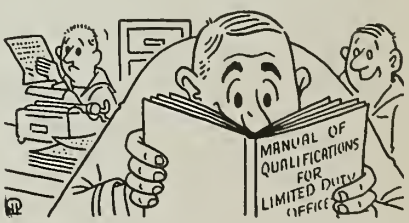
One school of thought held that LDOs were in training to become general line officers. The other followed Admiral Sprague's concept of the LDO in the officer structure.

As time passed these firmly held but opposite opinions caused considerable confusion. To add chaos to the confusion, there was a wide spread belief that LDOs were really warrant officers with solid stripes on their sleeves—you couldn't tell the place and duties of an LDO from those of a warrant.

To help remedy the situation, in September 1953 a board of officers (the Grenfell Board) was convened to study and make recommendations on "Limited Duty Officer and Warrant Officer Titles, Classifications, Technical Fields and Normal Paths of Advancement."

Six months later, in its report to the Chief of Naval Personnel, the Grenfell Board stated: "The Board strongly recommends that a qualifications manual for warrant officers be published by the Bureau of Naval Personnel as soon as possible and that a similar manual be originated and published for the limited duty officer as well."

The Warrant Officer Manual (*Manual of Qualifications for Warrant Officers, USN* NavPers 18455), was published (see ALL HANDS, January 1957, pp. 12-13) in Novem-

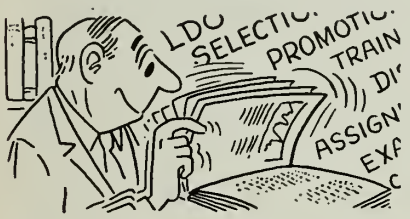


ber 1956. It was the result of months of careful research which included on-job analyses, interviews, questionnaires, conferences, and checks and rechecks with cognizant technical bureaus and commands.

Read This

After additional research, similar to that done for warrant officers, the *Manual of Qualifications for Limited Duty Officers, USN* (NavPers 19564) now has been published.

This manual is the official publica-



tion for providing basic occupational information and defining qualifications, requirements and professional areas of responsibility for each limited duty officer category and grade.

The introduction of the manual defines the role of the LDO as "that of supervisory specialist in the specific technical area represented by his category. His career development is based upon increased supervisory and administrative responsibility in the area of his specialization as he advances in grade. *U. S. Navy Regulations* (1948) prescribes limited duty officer rights, restrictions, precedence, authority and regulations for succession to command."

Here's the difference between a warrant and LDO:

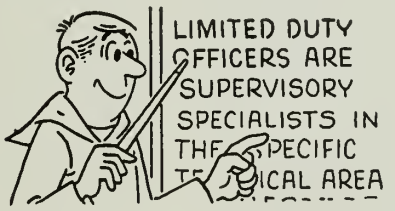
The role of the warrant officer is that of *technical specialist in a prescribed occupational area;* the role of the limited duty officer is that of *supervisory specialist in the specific technical area represented by his category.* The concrete example given below will illustrate the difference.

With definitive manuals to dispel the confusion concerning the distinctive roles of warrants and LDOs, enlisted men can refer to these guidebooks and chart their career patterns with some assurance that each step is in the right direction.

In the new LDO manual, for example, you will find 13 categories with qualifications requirements for all grades from ensign through commander. The manual specifically sets forth the executive (general) qualifications required of all limited duty officers without reference to grade or category. There are 32 of these general, or executive, qualifications. The first, for example, requires the LDO to know the: "Principles and techniques of leadership as applied to motivation of personnel, maintenance of morale, acceptance of responsibility, and delegation of authority."

A chart shows the path of advancement from enlisted through warrant officer, to all LDO categories. There are, however, no categories of LDO for Medical or Dental Service Warrants. Their path of advancement is to Medical Service Corps. The new Operations Technician Warrant advances to LDO, Deck. The Warrant Photographer and Bandmaster have no specific LDO category as part of their normal path.

Professional qualifications for each of the 13 LDO categories have separate sections within the manual, covering in detail the requirements for each specialty area. To take one at random—LDO Ordnance (1710):



"are operational specialists in the field of operation and maintenance of ordance equipments and ammunition of all categories other than aviation ordnance.

"Ensigns and lieutenants (junior grade) plan, supervise, and direct the activities of ordnance personnel in the performance of operational and maintenance functions; plan, develop and administer ordnance training programs; assist in organizing and supervising gunnery, fire control, and underwater ordnance exercises and drill. They are responsible for assigning, supervising and coordinating activities of personnel under their command. They have practical naval experience in other areas and as a result, they may be assigned to unrestricted line type billets.

"They may serve as assistant to gunnery, fire control, underwater ordnance operations or ASW officer or as assistant to the First Lieutenant in small ships and in larger ships as a gunnery division officer, assistant main battery officer, assistant anti-aircraft battery officer, assistant ASW officer, assistant underwater ordnance officer, CIC watch officer or lookout and recognition officer. Ashore they may fill various ordnance billets in the Bureau of Ordnance and field activities as well as ordnance instruction billets.

To illustrate the difference of grade, here are the commander

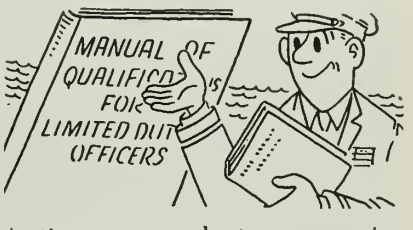
qualifications: "Commanders (1710) direct the activities of a department afloat, or a division, section, or unit ashore. They have practical experience in other areas and, as a result, are assigned to unrestricted line type billets.

"They may serve in any operational or administrative billet afloat or ashore commensurate with grade."

To further clarify the status of an LDO, let's continue with Ordnance.

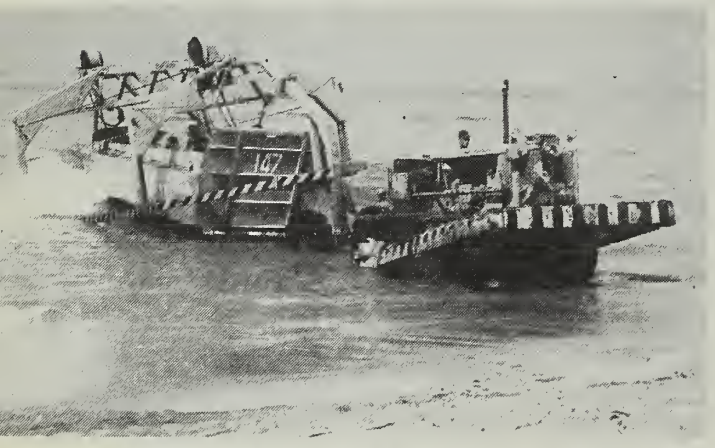
A chief petty officer is responsible for one technical area—gunnery, for example. The warrant officer is a technical specialist responsible for several CPO areas. Finally, the limited duty officer is responsible as a supervisory specialist over several warrant officer areas—surface ordnance technician, ordnance control technician, underwater ordnance technician, and mine warfare technician.

Already, because of technological advances and operational developments, Change No. 1 of the warrant officer manual has been published.



As time goes on, the two companion manuals will keep in step with other advances and developments. Such manuals cannot remain static. They must, and do, reflect the changes within the naval establishment.

SCHOOL DAYS — Landing Craft Control School trains Navymen in the techniques of handling landing craft.



LANDING CRAFT is lowered into surf for landing lesson. Course winds up with full-scale assault exercises.

FUTURE coxswains get experience off Silver Strand.

Assault Boat Coxswains

EVERY TWO WEEKS some 20 men from the Pacific Fleet's Amphibious Force report to the Landing Craft Control School at the Coronado Naval Amphibious Base for a four-week course of instruction.

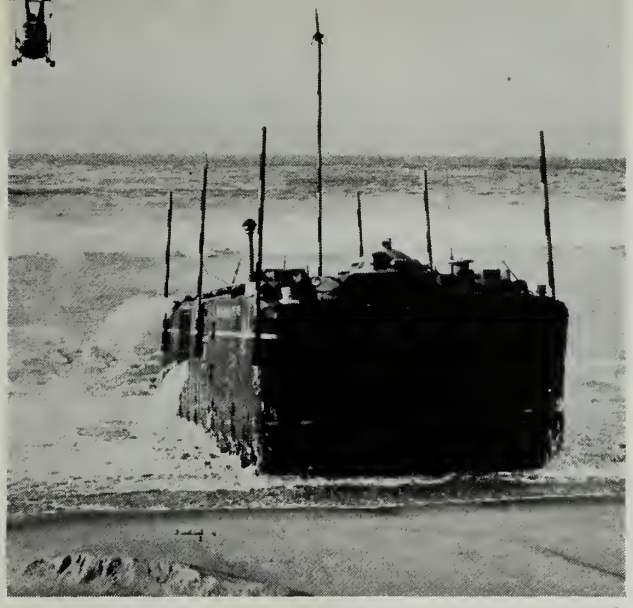
The course covers a wide range of training programs. But they all aim toward the ultimate success of an amphibious assault. Probably the most important part of the course is the training of Navymen as assault boat coxswains.

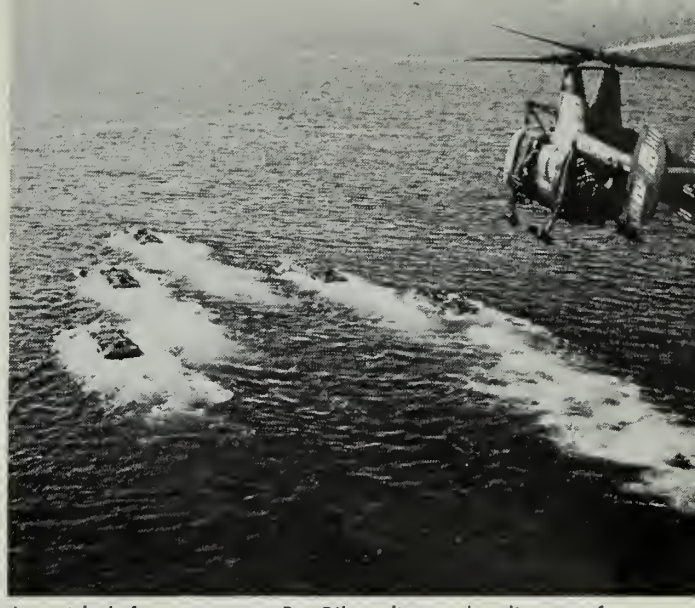
During the first three days of the school, the men are taught how to survive in the water which includes passing a second class swimming test. Then they are instructed in telephone-talker technique since, as assault boat coxswains during an operation, they will receive their orders over short-range boat radios.

The second week is taken up with classroom and practical instruction followed by their first landing in an LCVP on the beach inside the bay. This includes handling all problems which come up during an operation while in control of that type craft.

The students graduate to LCMs during the third week and get actual experience in handling these and LCVPs in the surf off Silver Strand.

Climaxing the final week of school is a simulated operation. Marines from Camp Pendleton take part in this operation and the assault boat coxswain gets actual experience working in choppy water while taking troops and cargo aboard and delivering them to the beach.





NO HANDS — An unmanned Marine LVT 5 hits the beach guided from copter. *Rt:* Pilot directs landing craft.

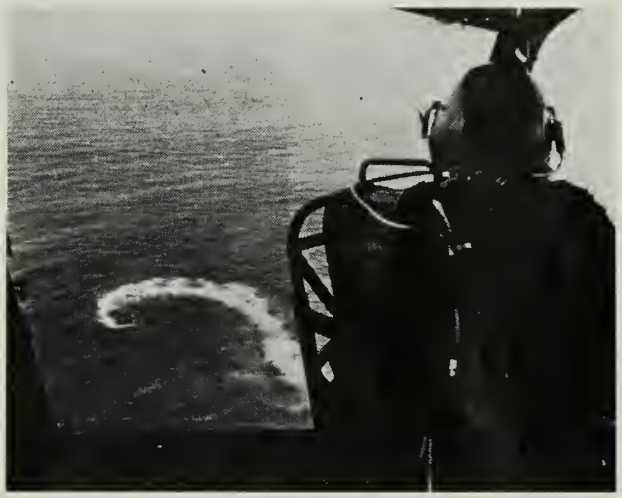
Airborne Coxswains

"WHO'S DRIVING?" was the question asked when a wave of new antenna-studded Marine amphibious assault vehicles landed on a California beach—without a single Leatherneck on board.

The driver of these new landing craft was sitting high and dry in a helicopter in the sky, controlling and maneuvering them with the greatest of ease.

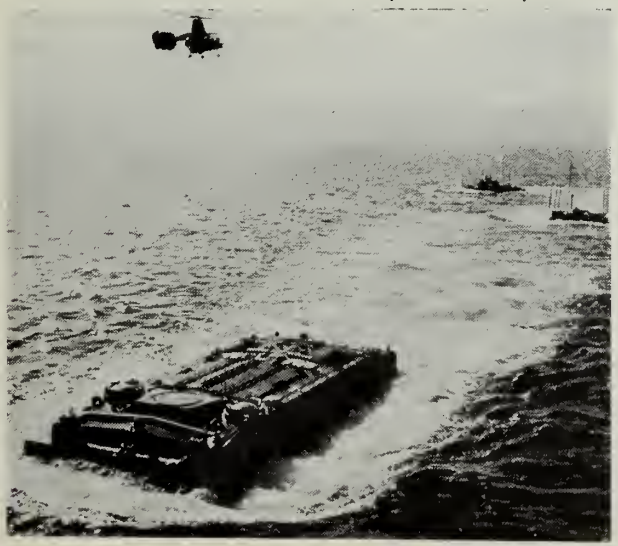
On Pacific beaches at Camp Pendleton and Monterey, Calif., U. S. Marines have been surf-testing amphibious vehicles controlled by radio from helicopters hovering over head. In this technique the airborne coxswain guides Marine Corps LVTs (landing vehicle track) with a portable electronic control panel.

By moving a steering stick similar to an aircraft control stick and by manipulating buttons and switches mounted on the panel, the driver in the copter can start and stop the engine, steer, shift gears, brake and apply throttle. He can operate the vehicle through deep water, pounding surf, and even on dry land as well as if he were seated at the manual controls of the landing craft and from his perch on high he has a better view.



HIGH AND DRY driver of amphibious assault craft sits in copter. *Below:* Amphibs are maneuvered on beach.

RALLY ROUND—Trio directed by copter churn up water.



AT SEA WAVE medical corpsman checks record with Navy nurse. *Rt:* Minor scuff is fixed by the WAVES.

Sea-Going Waves? It's True —

NOWADAYS there is more than one kind of wave on the high seas. The first is the well known aqueous kind, the second is Navy women serving as hospital corpsmen on MSTS ships that are used to transport the Navyman's dependents.

Five years ago on the eve of the Waves' 11th anniversary the Navy changed the regulations that had previously landlocked enlisted women. Since then sea duty has become one of the most popular duties among the women in blue as the Wave Corpsmen long waiting list for ship board duty testifies.

In the Atlantic area Waves get a chance to serve in a total of eight MSTS ships making cruises that include runs to the Caribbean, Mediterranean and Europe. In the Pacific they serve on board transports sail-

CHOW: Bottles are readied. *Rt:* Comforting words. *Above:* WAVES on *USS General Alex M. Patch* (T-AP 122).

MSTS WAVES work in ship's sick bay.

Here's a Sample

ing out of San Francisco and Seattle. They make ports in Japan, Hawaii, Guam and many other Pacific islands as well as Alaska. While in these foreign ports the Navy women enjoy liberty until their ship is ready to move on.

Wave hospital corpsmen of Lant, Pac and NorPac, while afloat, devote full time and attention to taking care of dependent wives and children. Their principal job is manning the formula room where they prepare bottles for feeding the babies. Since they may have as many as 50 infants on board, each with a different schedule, the formula room is a busy place around the clock. They also assist the medical officer in the treatment room during dependent sick call and stand watches if female passengers are admitted to ship's sick bay.

While on board, Waves are billeted in a cabin next to the Navy Nurse Corps officer, who is their immediate supervisor while on duty. When the MSTS transports return to home port, the Navy enlisted women are detached from the ship upon the debarking of dependents and are assigned quarters ashore.

When sent ashore from their assigned ship the Wave Hospital Corpsmen go on leave or if their ship is to be in port for a while they are then assigned TAD at nearby base.

OFF TO SEA — Two WAVES return to MSTSPac transport USNS *Fred C. Ainsworth* (T-AP 181) ready to cruise. *Below:* Principal duties in formula room.

SERVICESCOPE

Brief news items about other branches of the armed services.

IN THE RACK — U.S. Air Force Mace missile containing a new guidance system is readied for a test flight.

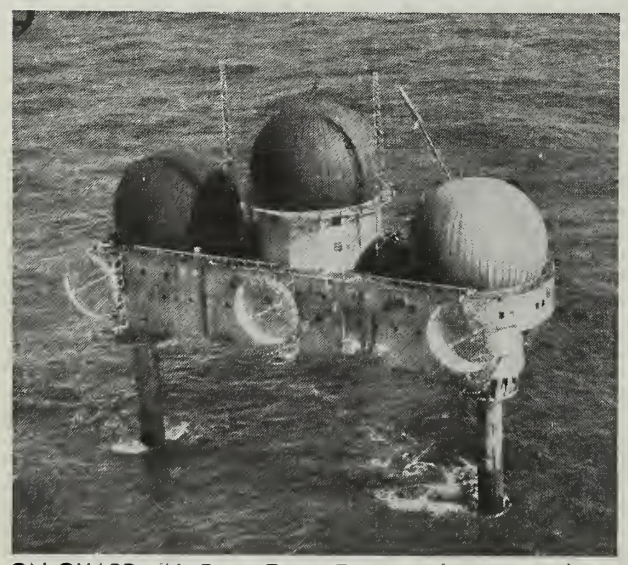
INFLATED AIR HOUSES, designed to protect crews checking out guided missiles and to facilitate maintenance of missile instruments, have been developed by the Army Quartermaster Corps.

The houses, made of lightweight coated nylon fabric and held rigid by a three-quarter horsepower motor-blower, can be erected in minutes and disposed of quickly when no longer needed.

The missile check-out shelter resembles an outsize marshmallow and was designed specifically to speed up inspection of the *Redstone* surface-to-surface missile. A four-man crew can erect the shelter in 10 minutes and a single crewman can dismantle it in seconds, enabling control personnel to begin firing almost immediately after instrument check-out. Another feature is that the air houses can be adapted for use with other missiles.

The novel type of shelter is secured to the vertical missile by a quick-release fastening device. A heavy duty slide fastener down the side of the structure opens immediately when a cord to the quick-release device is pulled. The outward rush of air literally blows the shelter away from the missile, speeding up an operation that depends upon split-second timing.

Illumination within the distended shelter is provided by a conventional lighting harness, with power from an auxiliary gasoline generator.



ON GUARD—Air Force Texas Tower radar stations keep off-shore lookout for planes approaching from sea.

★ ★ ★

ALL PLANES OF the Strategic Air Command are getting new super-range radios which provide faster, more reliable communications.

Known as the single sideband high-frequency communications system, the equipment already is being used in some of the Air Force's special mission aircraft, including the Presidential plane *Columbine*.

Modifications will be made in the B-52 and B-47 bombers and the KC-97 and KC-135 tankers. About $3.5 million has been allocated for the first 900 conversions.

The change-over in the B-47 will be done while the six-jet bombers are undergoing their recently announced modernization program.

During the past year SAC and commercial aviation companies have conducted tests which indicate the superiority of the single sideband radio as being less affected by atmospheric disturbances, adjacent channel interference and weak or fading signals.

★ ★ ★

A BATTERY VEST which utilizes human body heat to keep dry cell batteries warm and active in extremely cold weather has been developed for the Army. This new development will enable radio operators to wear the vest-like garment beneath parkas where the dry cell batteries can capture body heat. A cord is used to plug in standard Army radios.

Batteries go dead rapidly when extreme cold slows down their electrochemical action, so keeping them warm is especially difficult when troops are on the move. However, with the vest, batteries developed for low-temperature use are expected to stay in service 10 times longer in 40-degree below zero temperature.

The battery vest has been undergoing rigorous field tests in Alaska where Army Signal Corps communications engineers found the technique extremely valuable. Special pouches in the vest also could keep chemicals and drugs warm when explorers are on the trail.

★ ★ ★

ALASKA'S FIRST NUCLEAR POWER plant is being built by the U. S. Army.

The nuclear power plant—modeled after the prototype plant at Ft. Belvoir, Va., which has been in operation since last spring—will provide both heat and power for the Army post at Ft. Greely, located about 85 air miles southeast of Fairbanks, on the Alaska Highway.

Fort Greely was selected as the site for the nuclear power plant, known as an "Army Package Power Reactor" (APPR), because it is in a location which will provide an operating test of the plant under extreme cold weather conditions, and still be readily accessible

by air and road. Winter temperatures at Ft. Greely have dropped as low as 63 degrees below zero (F).

The APPR derives its name from the fact that its equipment components are designed to be transported by air if necessary for installation in plants constructed at remote locations. It is the first of a family of nuclear power plants under development by the Atomic Energy Commission and the Department of Defense for use by the military at remote installations. The design specifies that the components must be transportable by air and capable of erection at a remote field site within a six-month period.

When completed, the Ft. Greely plant will produce 42 million BTU per hour in steam for space heating, and about 1700 kw of electricity. The electrical output is sufficient for a town of 2000 population.

★ ★ ★

A GYRO-ELECTRONIC CONTROL system has been devised for the Air Force to prevent its hypersonic rocket plane, the *X-15*, from destroying itself after returning from a probe into outer space.

The *X-15*, now under development is scheduled to make its initial research flight in 1959. It is expected to attain an altitude of more than 100 miles at a speed of about 3600 miles an hour. That's a mile a second.

The principal job of the advanced flight instrument system is to help the *X-15* pilot control the aircraft, preventing it from burning-up on re-entry into the earth's denser atmosphere too steeply from outer space, or from "bouncing back" excessively because of hitting the heavier air at too shallow an angle.

The system is composed of a three-gyro "stable platform" which provides critical altitude, velocity, distance and altitude "sensing," and a lightweight computer.

The instruments have been built to withstand accelerations of more than 10 times the force of gravity.

Adaptable to other forms of missile guidance, the system will be used in other outer space experiments. It can also permanently chart a flight by feeding information into airborne recorders.

ICEMEN—Coast Guard icebreakers crash through Arctic ice in discovering new deep-water Northwest passage.

AFTER SEVEN YEARS of study, the Air Force is going ahead with plans to develop an advanced boost-glide aircraft.

Known as *Dyna-Soar*, the research aircraft will be rocket-boosted to near satellite speeds and altitudes, then turned to unpowered "glide" flights estimated at 17,000 miles per hour.

The vehicle will be capable of many varying missions. Eventually the *Dyna-Soar* will become a strategic weapon. It could be teamed with long-range ballistic missiles to form a virtually invincible offensive combination the Air Force claimed.

Either manned or un-manned, the plane will be able to operate from space altitudes down to well within the atmosphere where it can maneuver and be recovered undamaged.

Dyna-Soar is one of several projects investigating manned space flights. The "high flying glider" has been under study by the Air Force since 1951.

LOPAIR is Army's new infrared device for detecting air contamination. Here, detector is adjusted and transported.

Nineteen Navymen Saved by Daring Action

THE SUBMARINE BASE at New London, Conn., which staged a traffic safety campaign that probably saved close to 20 lives in 1957, has passed on some how-to-do-it hints that other commands might do well to follow.

In 1955 the base had 19 traffic deaths among its off-duty personnel. In 1956 the unlucky number was exactly the same—19. Then, in 1957 New London conducted an all-out drive to cut down on the slaughter, and the number of deaths dropped

to a nice round zero. In fact, the base went for more than 374 days without a fatality, thanks largely to its concentrated safety effort.

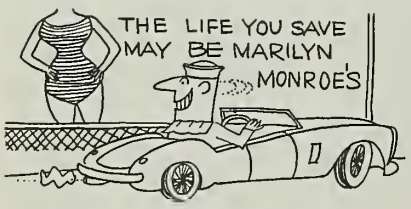
Here are some of the features that helped to make that effort such a success.

Safety rallies were held once a month with an average attendance of 900 and special rallies were held before long holiday weekends. Highway safety films were shown, and slides showing accidents were exhibited by State Traffic Safety Division police. During the year about 11,000 Navymen were reached by this program.

Large photographs of accidents were exhibited around the base.

Large maps showing safe driving distances for a liberty timetable were displayed.

Safety messages or jingles were



carried in the Plan of the Day.

State and local dignitaries were invited to speak in connection with state and local safe-driving programs on special occasions.

A blank space, large enough for a photograph, was reserved on Safety Bulletin Boards under a "Who Will Be Next?" label.

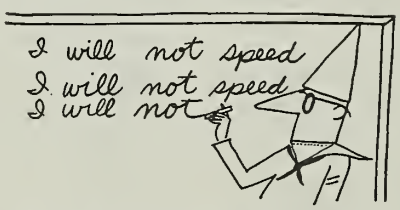
An area Planning Sub-Board and traffic safety advisory groups were set up to develop ideas and offer suggestions for all shore and afloat activities.

The Sub-Board for Highway Safety held conferences with the police chiefs of nearby communities to discuss problems of mutual interest.

Anyone apprehended for a traffic violation was required to attend a School for Safe Driving one hour per night for seven nights, and to pass the written examination required by the Department of Motor Vehicles for Connecticut residents. And, if the individual failed the test, he had to repeat the course.

Safety lectures were made a regular part of the indoctrination of newly-arrived personnel and were also used as refreshers for other assigned personnel. Guest speakers with experience in the field of civil traffic safety frequently participated in these lectures.

A mobile highway safety patrol was established to cover the well-traveled state highway with two patrol cars during most liberty hours.



These military units were organized into nine divisions and a weekly scoreboard count was posted to show how the divisions stood on a competitive basis in the Highway Safety Campaign.

Violators of traffic regulations, apprehended by either civil authorities or the military highway safety patrol, were issued tickets setting forth their offenses and a copy of the ticket was mailed to each violator's command. These offenses were scored using the State of Connecticut point system, and a master scoreboard, showing how each major command stood in the safety campaign, was prominently displayed near the entrance to the Sub Base.

Wrecked automobiles with appropriate reminders were displayed close to areas where men departed on liberty.

Weekly safety slogans were adopted and conspicuously posted.

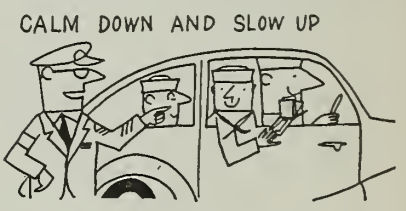
CPOs were stationed at the main gate to caution each carload of passengers, who seemed to be in a hurry, to calm down and slow down.

Liberty was staggered to allow more daylight time for travel.

Bumper stickers, posters and National Safety Council handouts were circulated to car owners.

Safety articles and the latest standings in the safety competition were published weekly in the station newspaper.

Publicity in local newspapers was obtained through stories on the military patrol, the number of fatality-



free days and other items of public interest.

Handout cards and key rings bearing safety slogans were issued. The cards, when returned to the command after leave or long liberty involving an automobile trip safely completed, entitled the driver to extra liberty.

Various ideas, such as pantomimes, pageants, posters and the like, were tried out at the monthly safety rallies.

From its experience in the safety field, New London found that the two features which did the most to make the campaign a success were the safe driving classes for all offenders and the mobile military highway patrol. The patrol's efficiency and courtesy gained the respect of

all who came in contact with it. During the year the patrol traveled some 108,000 miles—which is equal to about four trips around the world—without an accident. In the process it issued some 800 tickets to military offenders.

Other commands, interested in reducing off-duty motor vehicle accidents, can find out how New London did it by checking out on BuPers Notice 5101 of 11 Jun 1958.

LETTERS TO THE EDITOR

Which Discharge Counts?

SIR: A letter to the editor concerning educational benefits for Korean veterans, which appeared in your January issue, has me confused over the difference between conditional and unconditional discharges.

In my case, I reenlisted for six years on 21 Apr 1950. I was honorably discharged on 19 Apr 1956 and reenlisted on 20 Apr 1956 for another six years. I expect to be transferred to the Fleet Reserve in 1960. As you can see, I was on active duty during the basic service period (27 Jun 1950 to 31 Jan 1955).

According to the language of the law, I must begin my schooling within three years of my first unconditional discharge after 31 Jan 1955. Therefore, if my discharge of 19 Apr 1956 is considered an unconditional one, I couldn't start my education after 19 Apr 1959. However, if that '56 discharge is considered conditional, and my transfer to the Fleet Reserve were considered unconditional, I would have until 1963 to start to school.

Which discharge counts?—D. C. P.,

• *The discharge you received on 19 Apr 1956 is the one from which your three years would be measured.*

As we said when we answered that letter in January: "The term 'unconditional discharge or release' means a discharge or release from active service which relieves the recipient thereof from any obligation for continued active service."

When you were discharged in '56 you were not obligated to reenlist, so that was an unconditional release from active duty.

If, on the other hand, your separation was of a "conditional" nature, that is, exclusively for administrative purposes, your discharge would have been a conditional one, since it would have been based on the condition that you were being released early only in order to reenlist. As a result, you would have been obligated to remain on active duty.

Incidentally, there was a typo in that January letter. We should have said the basic service period began on 27 Jun 1950. Instead, we said 29 Jan 50.—ED.

Early Photo-Triangulators

SIR: In your February 1958 issue you mention the use of photo-triangulation in gunnery practice in two stories, "Shooting It Out for the Record" and "They Help the Navy to Fire Straight," yet you didn't mention either of the two officers who probably started the whole thing—LCDR L. C. Palmer (later Chief of the Bureau of Navigation) and LCDR H. C. Mustin.

Back around 1907 and 1908 LCDR Palmer was Gunnery Officer of USS *Vermont* and LCDR Mustin, Gunnery Officer of USS *Kansas*.

At calibration practice Palmer had photos taken of the splashes of our 7-inch, 8-inch and 12-inch shells to get an idea of their shape and size, and in 1908, during battle practice in Manila Bay, he had a crew stationed on a raft to take pictures of all salvos. Of course, the photos taken from the raft only showed overs and shorts. The rights and lefts had to be taken from the ship spots, but even at that we were able to increase our hits considerably.

Mustin had about the same idea, and had snapshots taken of his firing.

The present-day triangulation cameras came about largely as a result of LCDR Palmer's work in Manila Bay.—W. Eberlin, LCDR, USN (Ret).

• *Unfortunately, when we are working on material for the magazine, limitations on time and space often prevent us from making side-trips into every phase of our subject, and even when we do have time it's pretty hard to dig up information like that you have given us. However, thanks to such letters as yours, we're sometimes able to take these excursions without having to do all the work ourselves. And, for our guides we have eyewitnesses such as yourself, who were in on the events when they happened.*

Glad to have you as a reader—and as a writer of letters to us.—ED.

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D. C.

CO's Order Book

SIR: The command to which I am attached is preparing for the annual administrative inspection. In checking to see if the personnel office was performing its full duties and ready for inspection we came across the question: "Does your command maintain a CO order book?"

We don't, and I have been unable to find any instruction indicating that we should or shouldn't. I went to the officer who would be holding the inspection and asked if we were required to have the CO order book. He replied that he didn't know, but since it was on the inspection form he would have to count it against us.

I realize that such a volume might be used once or twice a year, but I do not think it would be an advantage to any personnel office to keep an extra logbook used so infrequently. Please clarify.—M. D. H., PN2, USN.

• *A "CO's Order Book," as such, is not required by Navy Regs. Article 0714 states that orders and matters of interest shall be published to the command, but in context, it appears to refer to standing general orders.*

Article 0751(m), which is applicable to COs of ships and aircraft, deals with a night order book *applicable to navigation and avigation. It is not believed that the "note" at the beginning of Chapter 7, Section 2, was intended to expand its application to other activities of the Navy.*—ED.

Reenlistment in Reserves

SIR: When my current enlistment in the Reserve expires in August, I will have 10 years' and eight months' naval service—all but two months of it active duty. Since I was too old for reenlistment in the Regular Navy (from a Reserve status), I shipped over in August 1954 and agreed to remain on active duty for three years. Last August, I agreed to remain on active duty for the balance of my enlistment.

Is it possible for me to ship over in the Reserve in August and remain on active duty? I will be 47 years old at that time.—E.C., END1, USNR.

• *BuPers Insts.* 1133.10A *and* 1133.11 *take care of cases like yours. You probably already know that the maximum* computed age *for reenlistment in the Naval Reserve can not exceed 44 years. In determining this* computed age, *you subtract all previous active and inactive military service from your calendar age.*

In your case, you'll be 47 years old and have 10 years and eight months of service when it's time for you to reenlist. What you do is deduct 11 years from your calendar age of 47 and come up with age 36. This will overcome the computed age *of 44 by eight years and make you eligible, so far as age requirements are concerned, for reenlistment in the Naval Reserve.*—ED.

PACIFIC PORT—*USS Westchester County (LST 1167)* pulls in at San Diego. She was one of five new LSTs transferred from Atlantic amphibs.

Chances for More Education

SIR: Over the past couple of years I have made my own one-man poll on the subject of educational opportunities. I asked approximately 500 Navymen about schools and colleges to find out if, given a chance to go to college, they would do so and put forth a 100 per cent effort to graduate. Those I talked to had a GCT and ARI score ranging between 90 and 100, which put them in the class of "average normal intelligence." Their ages ranged from 18 to 28.

During this informal survey 70 per cent of the men I talked to expressed a great desire to go to college. They also said that if they could get their education while in the Navy they would stay in for 20. All of these men were high school graduates.

Of the remaining 30 per cent, half were not high school graduates and they said they were too old to learn. The other half said they didn't want to beat their heads against the books and that they'd rather "ride with the current."

Since the Navy Enlisted Advanced Schooling Program requires a GCT and ARI total of 118, it is out of reach for the 70 per cent who wanted to go to college. The Tuition Aid Program is also out of reach for many of them, due to the expense involved. Yet, the Navy is crying for men with technical education.

Being in the 70 per cent category myself, I'd like to find out how we can get a higher technical education when, for many of us, both these programs are out of the question.—J. P. B., EM2, USN.

• *Before we go into the schooling available, we'd like to remind you of something you may have overlooked in your survey.*

You have referred to a GCT and ARI score ranging between 90 and 100 as putting a man in the class of "average normal intelligence." It is true that as a general rule a score of 50 on either test has been considered "average." However, although there is a correlation between the two types of tests, the GCT is not strictly an intelligence test, as is generally supposed.

The GCT and ARI portions of the basic battery of tests you took when you entered the Navy indicated the level of your verbal knowledge, and of your achievement in arithmetic at that particular time. Most individuals in the combined GCT-ARI range of 90 to 100 would have difficulty with college level studies even though they are high school graduates. So, if the group you approached were truly in the 90-100 range, chances are the majority of them probably wouldn't qualify for admission to institutions of higher learning. That's why the combination score of 118 is used as a minimum for NEASP. Men below that level would probably have trouble with the level and rapidity of the instruction given under that program. (For more on NEASP see the article on page 48).

There also may be something else you didn't take into consideration, when you counted yourself out so far as NEASP was concerned. You, as an individual, probably have a pretty good idea whether your own GCT and ARI scores are an indication of your actual ability, or if they only indicate your achievement as of a specific time. Perhaps, because of the interest in improving yourself which your letter apparently indicates, you have read widely in the years since you took those tests as a recruit, thereby improving your vocabulary and general reading comprehension. And, perhaps you have taken additional work in mathematics. If so, it is possible that you could improve your scores on a retake of the examinations. Permission to retake them will be granted by the Chief of Naval Personnel when the reasons for the re-examination are valid.

Now then, even if NEASP and the Tuition Aid Program are both out of the question, you still have at least three other ways in which to add to your technical knowledge. One of them is the U. S. Naval School, Electrician's Mate (Class B), which convenes at USNTC, Great Lakes, Ill., every two weeks. As an EM2 you are eligible for that.

The other two are the USAFI program and Enlisted Correspondence Courses, which your Information and Education Officer will be glad to talk over with you. In addition, he may be able to point out some opportunities for study which are available locally. —ED.

Six Stars for Hoel

SIR: The *Navy and Marine Corps Award Manual* (NavPers 15790—Rev. 1953) lists five engagement stars for USS *Hoel* (DD 533), the last one being for her participation in the capture and occupation of the southern Palau Islands (6 Sep to 14 Oct 1944).

I understand this ship was in the Battle of Surigao Strait until she was sunk on 25 Oct 1944, yet the manual lists no star for her in this engagement.

Doesn't she rate one?—S.A.B., CDR, USN.

• *She most certainly does—and action is now being taken to see that the Manual gives her credit for it.*

In the pivotal Battle of Surigao Strait, which gave the U. S. Fleet command of the eastern approaches to the Philippines, Hoel *fought in the action off Samar as a member of Task Unit 77.4.3. As a result, she rates not only a battle star, but also a share in the Presidential Unit Citation which she helped the task unit to earn.*

Besides Hoel *the ships in on the beginning of the battle were* USS Fanshaw Bay *(CVHE 70).* St. Lo *(CVE 63),* White Plains *(CVU 66),* Kalinin Bay *(CVE 68),* Gambier Bay *(CVE 73),* Kitkun Bay *(CVE 71),* Heermann *(DD 532),* Johnston *(DD 557),* Roberts *(DE 749),* Raymond *(DE 341),* Dennis *(DE 405)* and Butler *(DMS 29). The Japanese forces consisted of four battleships, four to six heavy cruisers and from seven to 10 destroyers.*

On 18 October, TU 77.4.3 began operating independently as a Northern Air Support Group about 60 miles east of Samar. Hoel *was part of the unit's antisubmarine and antiaircraft screen when the enemy force unexpectedly came through Surigao Strait in the early daylight hours of 25 October. During the hectic two-hour period which followed,* Hoel *put all she had into a desperate effort to cover the escape of the CVEs. In the process she*

The Nuclear Sub and Antisubmarine Warfare

SIRS: What happened? After reading the April issue of ALL HANDS in which you covered antisubmarine warfare from every possible angle, I was convinced that a sub didn't stand a chance against the Navy's highly versatile air, surface and sub-surface ASW team.

If such is the case, what happened when USS *Nautilus*, SS(N)571, the world's first atomic sub — now a granddaddy—entered San Diego harbor after transiting a 100-mile area patrolled by an ASW squadron consisting of destroyers, patrol planes, helicopters and submarines, without evening being detected or "sunk."

This performance by *Nautilus* was not a one-in-a-million shot either. The records show that she has had similar performances time after time. This is only the second time that she has had the opportunity to show her stuff to units of the Pacific Fleet. And show her stuff she did. Again she proved her ability by cruising underwater so fast, diving so deep and maneuvering with such agility that the highly trained ASW units of the Pacific Fleet could not cope with her.

All I can add to this is that Commander Anderson and *Nautilus* deserve another WELL DONE and our highly praised ASW units better get hot.—G.W.T., TM1, USN.

• *We also take our hats off to* Nautilus *but we must also emphasize the fact that our ASW forces are now "hot" and getting better all the time. And one of the major reasons for this improvement is because of* Nautilus *and our other atomic subs.*

When ALL HANDS *planned its ASW issue, we took into consideration that our existing ASW forces—destroyers, killer groups, patrol planes, blimps, submarines, and what have you—were capable of combating conventional subs. That's why we gave you all the a destroyerman's, airman's and submariner's point of view.*

But when it comes to killing nuclear subs—that's something else.

We pointed out again and again throughout one April issue that existing ASW forces are not capable of stopping a large number of nuclear submarines.

We are extremely fortunate, however, because this country does have Nautilus *and other nuclear subs to assist in training our ASW forces. Through extensive operations with them, the ASW forces have gained new knowledge and have launched an all-out concentrated effort to come up with new means of detecting and killing atomic subs.*

Before the U. S. Navy can do this nuclear sub-killing job—the way our ASW experts believe it has to be done —we'll need a major antisubmarine "breakthrough." Such a breakthrough can be expected in the not-too-distant future and will result in much greater detection ranges, and faster long-range weapons which will be capable of operating at extreme depths and will be able to overtake and destroy high-speed nuclear subs wherever they may be encountered. As an example of this just take a look at the Navy's new shipbuilding program which features nuclear-powered frigates and nuclear subs with even greater speeds than Nautilus *ever dreamed of. And be assured that these radically new ships will be equipped with the very latest type detection devices and ASW weapons available. More about this subject at a later date.*—ED.

took more than 45 hits from enemy shells.

She fired 10 torpedoes at the leading Japanese battlewagons and heavy cruisers in an attempt to damage or turn them, then made plans to retire to the southwest. However, by that time she'd been boxed in on all sides by enemy capital ships and she had only her two forward guns left to fire, so she didn't stand much of a chance. Japanese BBs were 8000 yards on the port beam and CAs were 7000 yards on the starboard quarter.

Altogether, according to one estimate, the enemy fired more than 300 two- and three-gun salvos at Hoel *during the engagement. Still, she kept hammering away as long as she could.*

"Before the ship sank," LT M. F. Green, USNR, Hoel's *CIC said, "we had to send people up to those two forward guns to chase the men out of there and make them cease firing and get off the ship. They didn't leave the gun mounts until there was a good list on the ship and she was settling by the stern."*

Hoel *continued to list to port and settle by the stern until finally, with a 20-degree port list and the fantail awash, she rolled over on her port side and sank stern first. She hadn't died in vain. Before going down she damaged several Japanese ships—one of them a heavy cruiser which was later scuttled. In addition, her main battery fire had effectively drawn much of the enemy's fire away from our carriers.*

There were 86 Hoel *survivors, many of whom were left in the water in rafts and a floater net for about 48 hours. Fifteen men died from wounds, exposure and shock. The losses might have been higher if the Japanese ships hadn't changed course to avoid running down the DD's rafts. "We don't know whether this was done for humane purposes or whether the Japanese thought our floater nets had mines attached to them," said Commander Leon S. Kintberger,* USN (Hoel's *skipper), afterward.*

When she went down Hoel *was only about 15 months old, but into those 15 months she packed as much fighting as some ships see in 15 years. Besides participating in the battle off Samar she saw action in the Gilbert Islands operation, the occupation of Kwajalein and Majuro atolls, the occupation of Eniwetok, the ASW operations of Task Group 30.4 in the Bismarck Archipelago area and, of course, the capture and occupation of the southern Palaus.*

Which all adds up to six battle stars between Hoel's *commissioning on 29 Jul 1943 and her heroic death on 25 Oct 44.*

Thanks for reminding us of what she did.—ED.

RIDING HIGH—Amphibious forces attack transport USS Okanogan (APA 220) makes way through Pacific off California coast. Her home port is Long Beach.

Seavey for Submariners

SIR: Is there any way an individual can extend his tour on board a submarine, other than the procedures indicated in BuPers Inst. 1306.62 for humanitarian reasons and ship operations?

If I were to write "shore duty not desired" in Block 15 of the Rotation Data Card, what consideration would this be given by processing activities?

And, last but not least, what effect will the Seavey/Shorvey Program have on the Submarine Force?

Your answer will mean much to all hands in PacFlt subs.—B.A.F., YN1 (SS), USN.

• *As to your first question, your best bet would be to advise the Commanding Officer, Enlisted Personnel Distribution Office, U. S. Pacific Fleet, that you want to stay in subs as long as possible. Since there is a shortage of qualified reliefs ashore at this time, submariners present a unique problem and many at sea will be extended.*

Of course, there is no guarantee that this will get you an extension. However, even if this doesn't work it won't necessarily mean that you'll have to say goodbye forever to submarines. All submariners will be returned to subs if the subs have an allowance for personnel of their rate.

Now for question number two. You may put "shore duty not desired" in Block 15. This is your block to tell your control officer what you want, and so long as your entry in that space is reasonable, you can expect it to receive careful consideration. The control officer reads everything on your data card before he makes a decision about you.

You may also write a letter to the Chief of Naval Personnel if you have a sincere desire to remain at sea. The rotation of personnel who are on operating ships (not preferred sea duty) and who sincerely desire to remain at sea is considered a hardship under the Seavey. Wait until you see if you are going to be extended automatically. If you are not, write your letter via the chain of command. Every effort will be made to keep you at sea provided someone else is not penalized because of it.

The over-all effect of Seavey-Shorvey on the sub forces will be one of very gradual change. Seavey will in no way interfere with sub force operations, but it will build up a reserve on shore duty to meet the problems of the future.

The plan is to rotate from subs to shore to subs. Naturally, when personnel are in a rate for which there is no requirement, or which is a crowded one in subs, they may have a problem returning to subs.—ED.

Who's As Hot as *Hyades*?

SIR: In the last three or four months I have noticed two articles on West Coast reefer ships in ALL HANDS Magazine, one being USS *Regulus* (AF 57) and the other USS *Vega* (AF 59). To put it bluntly I don't think they are so great.

As a former crew member of USS *Hyades* (AF 28), I believe we were hard to beat. During a trip to the Mediterranean in April and May 1957 we established two records for replenishment. *Hyades*, by the way, is equipped with steam winches and no conveyors. Everything had to be done by hand.

As you can see from the enclosed messages received by *Hyades* during that cruise, the West Coast ships had better take a back seat until such time as they can prove able competition. *Vega* and her 20-tons-per-hour would just be play for us. Also, I think *Regulus* had better get in plenty of practice.—W. R. Lawyer, PN2, USN.

• *The following are the messages received by the store ship* USS Hyades *(AF 28) during the April-May 1957, Mediterranean cruise:*

FM: USS GOODRICH (DDR 831)
ACTION: USS HYADES
EXCELLENT REPLENISHMENT X IT WAS A PLEASURE TO RECEIVE GROCERIES FROM YOU BT....
FM: USS SALEM (CA 139)
ACTION: USS HYADES
THANKS FOR AN OUTSTANDING JOB OF DELIVERING GROCERIES BT.....
FM: USS LAKE CHAMPLAIN (CVS 39)
ACTION: USS HYADES
YOUR DELIVERY TODAY OF 280 LONG TONS IN 2 HOURS 50 MINUTES FIRST TO LAST LOAD BEST PERFORMANCE WE HAVE SEEN X YOU REALLY PACKED OUR HANGAR BAYS X CONSIDER SUPERB DEMONSTRATION OF ORGANIZATION AND EFFICIENT LOADING X MANY THANKS BT....
FM: COMCARDIV FOUR
ACTION: USS HYADES
YOU HAVE THE BEST RIG CMM THE BEST ORGANIZATION AND THE HARDEST WORKING CREW THAT I HAVE EVER SEEN ON A REEFER BT.....
FM: COMSERVFORSIXTHFLT
ACTION: USS HYADES
COMCARDIV FOUR 111624Z AND LAKE CHAMPLAIN 110748Z PASEP X YOU HAD A BUSY DAY WITH ADVERSE WEATHER CONDITIONS BUT IN SPITE OF THE DIFFICULTIES ALL HANDS TURNED IN A SPLENDID PERFORMANCE X WELL DONE BT....
FM: COMSERVFORSIXTHFLT
ACTION: USS EVERGLADES (AD 24) / USS HYADES
CONGRATULATIONS ON A NEW RECORD TRANSFERRING RATIONS TO AN AD USING TWO RIGS DASH 54PT7 LONG TONS PER HOUR X SPIRITED PERFORMANCE OF BOTH CREWS AND EXCELLENT ORGANIZATION EVIDENTLY MADE THE RECORD POSSIBLE X WELL DONE BT....
FM: COMTRANSPHIBRON FOUR
ACTION: USS HYADES
OUR REFLENISHMENT IN GENOA WAS ACCOMPLISHED IN JIG TIME AND WAS QUOTE WELL DONE UNQUOTE BY ANY STANDARD X PRIOR TODAY I THOUGHT SIXTEEN TONS WAS A PRETTY GOOD DAYS WORK BUT FORTY TONS CANT BE DONE EXCEPT BY TRANSPHIBRON FOUR AND HYADES X WELL DONE TO ALL HANDS HYADES X COMMODORE BT....
FM: COMSIXTHFLT
ACTION: USS HYADES
YOUR INITIAL REPROVISIONING OF THE FLEET, FOLLOWED BY A TIMELY AND GRATUITOUS TOPPING OFF OF TF 60, WAS PERFECTLY EXECUTED X THE MANY PLAUDITS FROM YOUR SATISFIED CUSTOMERS WERE WHOLLY DESERVED AND DID NOT ESCAPE NOTICE X YOU SAIL HOMEWARD NEARLY EMPTY OF EVERYTHING EXCEPT OUR APPRECIATION BT....
FM: COMSERVRON TWO
ACTION: USS HYADES
QUOTE WELCOME HOME UNQUOTE X WELL DONE ON AN EXCELLENT PERFORMANCE WITH SIXTH FLEET X I WAS HIGHLY IMPRESSED IN READING THE MANY COMPLIMENTARY MESSAGES FROM YOUR CUSTOMERS BT....

Need we say more!—ED.

How Arizona Was Hit

SIR: For some time now, I have been reading in ALL HANDS about the bomb that went down the stack of USS *Arizona* (BB 39). It didn't.

I was attached to a repair unit at Pearl Harbor and was chief in charge of a group of acetylene cutters that removed all the superstructure and all topside steel down to the low tide level. In removing the stack, there were no indications that a bomb went down it, and it is only logical that a bomb would have torn the stack. After the stack was removed, soundings and diving disclosed that her battle grates were still intact. A bomb would have wrecked them.

Divers reported that her boilers were intact. Her forward bulkheads were intact, which would indicate that there was no explosion in the boiler room. It is possible that her ruptured oil tanks fed the fires on her.

After all the wreckage was removed from topside, we found a round hole, about 16 inches in diameter, alongside the 5-inch ammunition hoist, port side, in line with the hoist and stack.

It is possible that the bomb exploded the 5-inch magazines which, in turn, blew forward and touched off the 14-inch magazines and that all the force of the explosion blew forward.

As you know, much of her planking

was still intact and all the ammunition from her after magazines was removed and salvaged.

On the basis of this evidence I, for one, don't think a bomb went down her stack.—Louis J. Meindle, CMM, USN (Ret.).

• *You were there, and your evidence sounds convincing. We quote from* Arizona's *ship's history, compiled by the Navy Department's Naval History Division, Ships' Histories Section, which we assume to be the official versions. "Thundering explosions jolted the ships as a torpedo ripped into her port side and a large bomb went down the stack. Another large bomb of armor-piercing type, hit the forecastle, penetrated to a powder magazine and the resulting explosion in turn exploded* Arizona's *main forward battery magazines."*

This statement sounds as if they know what they're talking about. Nevertheless, we are forwarding your letter to Ships' Histories for their comment. We'll let you know.—ED.

SIR: Thanks for permitting us to comment on Chief Meindle's letter. As you state in your reply, his "evidence sounds convincing." To this we can only say—maybe so.

Here is a little more information from the official records:

1. SOURCE — *Commanding Officer* Arizona *report to Commander Battleships, Battle Force, Pacific Fleet,* dated 17 Dec 1941: "One heavy bomb, apparently 1000 pound or 2000 pound, went down the stack. Extent of damage unknown."

This report was signed by the senior surviving officer, since Captain Van Valkenburgh was killed in action.

2. Source—*Report of ComBatShip, BatFor, PacFlt to CinCPac,* dated 19 Dec 1941: "One bomb struck the fore plate of Number 4 turret, was deflected and exploded on the third deck; one penetrated just forward of stack, and one went down the stack."

3. Source—*History of the United States Naval Operations in World War II,* Vol. III, *The Rising Sun in the Pacific,* by Samuel Eliot Morison: "*Arizona* barely had time to sound General Quarters, man battle stations, and set Condition Zed (complete watertight integrity) when she received several torpedo and bomb hits.

"One torpedo passed ahead of *Vestal* and hit under turret No. 1; but the thing that broke her up was a heavy bomb that hit beside the second turret, penetrated the forecastle, and exploded in one of the forward magazines before it could be flooded—so fast the action occurred. This explosion completely wrecked the forward part of the ship. Flames shot 500 feet in the air; scores of men, including RADM Isaac C. Kidd, who was on the signal bridge, and CAPT Franklin Van Valkenburgh, who was on the navigation bridge, were killed. This happened, apparently, before 0756.

"Shortly after, a second bomb went right down the stack, a third hit the boat deck, a fourth the face-plate of No. 4 turret; and four more struck the superstructure between the bridge and the tripod mast. *Arizona* listed radically, but settled so fast she did not capsize."

His report on the Pearl Harbor attack is based on CinCPac report to SecNav.

4. Source—*Press Conference held by Secretary of the Navy, Frank Knox,* on 15 Dec 1941, after his trip to Pearl Harbor: Query: "You say in this loss of *Arizona* that the bomb was said to have literally passed down through the smokestack. Was it a lucky hit?"

Mr. Knox: "It certainly was a lucky hit."

In a few words—"Officially, the bomb went down the stack."—K. L., Naval History Division.

• *You heard the man.* Officially, *the bomb went down the stack. You're still entitled to your opinion, but it looks as though the history books are going to say it went down the stack.*—ED.

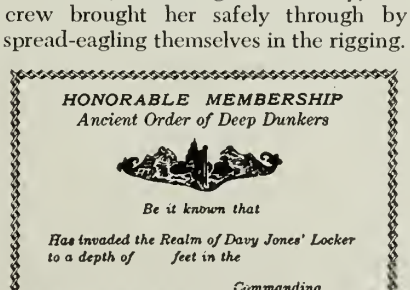
Memories of Nipsic

SIR: Just came across the "Way Back When" about USS *Nipsic* in your November 1957 issue. Since I knew her in her last days—1912—the item lit up the old eyes and brought back memories.

There is one slight error in the story. She actually ended her career as a floating brig, not a receiving ship, before the ship-breakers towed her to the beach and burned her for the metal in her hull.

I was a recruit back in 1912, when there were still quite a few veterans of the *Nipsic* days around. These old timers used to use 1889—the year *Nipsic* was in the storm at Apia Harbor—as a sort of marker. It was known as "The Year of the Big Wind," and whenever tales were told they were dated either before or after that event.

One of these tales was of the British ship that was with *Nipsic* at Apia. The Britisher's sails were torn to shreds when she tried running before the Big Wind and, according to the story, the crew brought her safely through by spread-eagling themselves in the rigging.



WE WOULD like to see different membership cards of this type.—ED.

FORE — All hands take cover to receive shot-line from *USS Tarawa* (CVS 40). The carrier, striving to improve her deck seamanship, tries this method of delivering shot-line during refueling at sea. It's reported to do wonders for the morale of the gang.

Another tale concerned Neils Torstensen, who had been a cox'n on board *Nipsic* during the Big Wind. As an elderly, 30-year chief master-at-arms, Torstensen was warden on board *Nipsic* during her last days. He retired about the same time as *Nipsic's* last decommissioning, and some years later—with "wind and water still in his veins"—he attempted a trip by himself from Puget Sound to San Francisco in a sailboat. What happened is not known, but his boat eventually washed up, dismantled and without him, on the coast of California.

This mystery gave the old timers something to talk about for a long time afterward.—John J. Wagner, SKGC, USN (Ret).

• *Thanks, Chief, for a very interesting letter.*

However, we're not so sure we made a mistake in our original story. The last paragraph of it says:

"In 1892 she was examined by a survey board, determined unserviceable for further warlike purposes and sailed to the Puget Sound Navy Yard where, among other duties, she was used as a receiving ship. On 11 Dec 1912 Nipsic *was stricken from the Naval Register." "other duties" would cover her service as a floating brig. But Nipsic has greater claims to fame in the Navy.*—ED.

Ship Reunions

News of reunions of ships and organizations are carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

• USS *Bugara* (SS 331) — A reunion will be held in conjunction with the annual convention of Submarine Veterans of World War II, St. Louis, Mo., 14-17 August. Write to John S. Pochask, 25 Pearl St., Everett 49, Mass., for further details.

• USS *Owen* (DD 536) — A reunion will be held over Labor Day weekend at the Broadview Hotel, East St. Louis, Ill. For further information, write to Floyd Wooster, 7155 Dobson, Chicago 19, Ill.

• *63rd Seabees* — A reunion will be held from 30 August through 1 September at the Kentucky Hotel, Louisville, Ky. For further information, write to Paul Matchuny, 6108 Estelle Court, Louisville 19, Ky.

• *Veterans of Fleet Post Office, N. Y., (Navy 107)* — The annual reunion of those who served with Navy 107, FPO, N. Y., during World War II will be held in New York City on 8 November. For additional details, write to Veterans of Fleet Post Office, N. Y., Box 36, GPO, New York 1, N. Y.

• USS *Alvin C. Cockrell* (DE 366) — Those who served on board since the 1951 recommissioning and who are interested in holding a reunion with time and place to be decided may write to Chuck K. Allendorf, 5602 Exeter St., Greendale, Wisc.

• *LCI(L) Flotilla Two* — Former members who are interested in holding a reunion may write to Paul Carter, 804 - 4th Ave., Iowa City, Iowa.

How Oglala Got Her Name

SIR: I read with interest your account of the two *Shawmuts* and two *Aroostooks* on pages 26 and 27 of the January issue. Whoever performed the research for it did a good piece of work. The only thing I found lacking was the reason why the second *Shawmut's* name was changed to *Oglala*.

I never saw USS *Oglala* while she bore the name *Shawmut*, but I did pay many a visit to her as *Oglala* (CM 4). That was when I was serving in USS *Whippoorwill* (AM 35), of Mine Division One at Pearl Harbor, T. H., from Dec 1938 to May 1941, as a Pharmacist's Mate, First Class, and later, CPhM (AA). Since *Oglala* was then the division flagship, I often took the "sick, lame or lazy" to her when I couldn't cope with their cases myself, or when complete physical exams were required for reenlistment, discharge or promotion to WO.

If I remember my naval history correctly, here is why *Shawmut* became *Oglala:*

Back in the 1920s there were two ships in the Navy with very similar names—USS *Shawmut* and USS *Chaumont*, a transport. *Chaumont* was one of the old "Hog Islanders," so-called because they were constructed at Hog Island, Pa.—now the Naval Shipyard, Philadelphia. Originally she had been an Army transport, but she had been taken over by the Navy along with USS *Argonne* (AG 31) (in which I served from 1934 to 1936). Both these former Army ships were named after World War I battles.

Because *Shawmut* and *Chaumont* people often misspelled both names, mail for *Shawmut* often wound up on *Chaumont*, and that addressed to *Chaumont* often wound up on *Shawmut*. Finally, in order to avoid the confusion, the Navy began looking around for another name for *Shawmut*—preferably an Indian name, since *Shawmut's* sister ship, *Aroostook*, had one and *Shawmut* did not. The new moniker was found through the then President Calvin Coolidge.

In the summer of 1927, President Coolidge visited the Badlands of South Dakota, where he was made an honorary chief of the Oglala branch of the Sioux tribe, so he was looking for a chance to repay the honor.

As a result, *Shawmut* became *Oglala* on 1 Jan 1928.—E. H. Kershner, LT (HC), USN (Ret.).

• *Thank you for an interesting bit of background information. However, since you pointed out that something was lacking in our story, we think it's only fair that we find at least one fault in yours.*

You say Shawmut *isn't an Indian name, but it sounded like one to us, so we began digging around in encyclopedias, dictionaries, atlases, history books and almanacs to try to find out where the name could have originated. We couldn't find the answer in any of them.*

Then, we sent out an SOS to the Ships' Names and Sponsors Section, Naval History Division, and we had the answer in a matter of minutes.

As we said in the January issue, the Shawmut *you knew as* Oglala *was the Navy's second* Shawmut. *She was named after* Shawmut *No. 1, a wooden gunboat of the Civil War era. However, the original* Shawmut *got her name from an Indian village in Mass., so it is an Indian name after all.*—ED.

The Story Behind Your Rating Badge

THE DEVELOPMENT of the Navy rating structure as it exists today is based on the "idea of the rating as an occupational career" in the sea service.

To insure an up-to-date rating structure there is a continuing study of the professional and technical phases of the ratings made by experts who have the latest knowledge about our increasingly complex and scientific ships, planes and ordnance. The rating badges, specialty marks and distinguishing marks which are worn serve to indicate the development of the Navy into its present-day organization of technicians and specialists.

But it wasn't always like this. The Continental Congress, back in April 1776, in its *Instructions to Commanders of Privateers,* stated: "One third, at least, of your whole company shall be landsmen" (that is, men on shipboard with no experience in seagoing). This might have been a Colonial recruiting expedient. At any rate it had the effect of making more landlubbers sea-conscious and willing to serve in defense of the youthful United States.

The first, rather feeble steps toward a rating structure were taken in *Rules for the Regulations of the Navy of the United Colonies.* This mentions the surgeon's mate, cook, armourer, gun-smith, master-at-arms and sailmaker. It also requires the captain to take care when any "officers or volunteer seamen are turned over into the ship under his command from any other ship, not to rate them on the ship's books in a worse quality, or lower degree or station, than they served in the ship they were removed from; and for his guidance he is to demand from the commander of the ship from which they are turned over, a list under his hand, of their names and qualities. . . . Whenever a Captain shall inlist a seaman, he shall take care to enter on his books the time and terms of his entering, in order to his being justly paid."

It's a safe conclusion that the sailing-ship Navy of the late 1700s had never heard of a Permanent Board for the Review of the Enlisted Rating Structure.

Old records state casually that Loblolly Boy was included in the Muster Roll of USS *Constellation,* in 1798, and USS *President* in 1800. (Loblolly according to the dictionary, is a "thick gruel" and the boy who served it to the patients became a "loblolly boy." The term loblolly is also nautical slang for medicine.) Somewhere along the line, the rating line, that is, he became a Surgeon's Steward which in turn was changed by SecNav letter in 1866 to Apothecary. By this time the function of the rating is beginning to show. *Navy Regs* of 1870 calls him Bayman (probably "Sick-bay"-man) and by 1898 he had become a Hospital Steward. In between these dates appeared the Hospital Apprentice. In 1917 the Hospital Steward became Pharmacist's Mate.

The Loblolly Boy of 1798 was the forerunner of the Hospitalman and Hospital Corpsman of today. But the duties of the earlier rating were defined a great deal more loosely than for their modern counterparts. "A convenient place shall be set apart for sick or hurt men, to which they are to be removed, with their hammocks and bedding, when the surgeon shall advise the same to be necessary, and some of the crew shall be appointed to attend and serve them, and to keep the place clean. . ."

Occupational descriptions for early ratings are rather sketchy too. "A cooper shall make buckets with covers and cradles if necessary. . . Any master-at-arms who shall refuse to receive such prisoner or prisoners as shall be committed to his charge, or, having received them, shall suffer him or them escape, or dismiss them without orders for so doing, shall suffer in his or their stead as a court-martial shall order and direct." The changes since then have been for the better.

According to the records, the early Navy took its time about identifying ratings by the symbols so familiar today. Not until 1841 in the *Regulations of the Secretary of the Navy* were distinguishing marks for enlisted men prescribed. At that time, boatswain's mates, gunner's mates, carpenter's mates, masters-at-arms, ship's stewards and ship's cooks were to wear an eagle and anchor on the right sleeve. Quartermasters, quarter gunners, captain of fore-ship's corporals and captains of the hold were to wear the same device on the left sleeve. Present *Uniform Regulations* define Distinguishing Marks as: "Embroidered devices symbolizing special qualifications additional to those required for the various ratings."

The 1889 *Uniform Regulations* have this to say: "All petty officers shall wear on the outer garment a rating-badge, consisting of a spread eagle placed above a class (designating the rate) chevron. In the interior angle of the chevron, under the eagle, the specialty mark of the wearer shall be placed. The badge shall be worn on the outer side of the right or left sleeve, half way between the shoulder and elbow." Art. 1202 of 1951 *Regulations* says that a rating badge consists of an eagle perched with wings expanded, tips pointing upward, head to eagle's right. The chevrons indicate the wearer's rate, and a specialty mark his rating.

These specialty marks were added to the enlisted man's uniform for the first time in 1866. They consisted of the tools or instruments used in performing specific duties. The master-at-arms, the police officer of the ship wore the star of authority—a white, five-pointed star; the quartermaster, a double marine glass; a gunner's mate, two crossed cannons; a carpenter's mate, a broad axe; captain of forecastle, two crossed anchors; captain of the top, an open figure-of-eight knot; sailmaker's mate, a fid placed vertically. The same custom of having the specialty mark represent as nearly as possible the tool used in the rating, or a symbol typical of the job, continues down to the present day, with one exception —the cook. The cook originally had as a specialty mark a ring typifying one of the rings found in the lid on the galley range. This ring, commonly called the "doughnut," was subsequently changed to a crescent, the mark worn by men of the steward rating today.

The chart on the following pages shows graphically the evolution of the rating structure in keeping with the changing Navy and the gradual outgrowth of certain ratings from very humble and unpretentious beginnings. You take it from there and visualize for yourself the change in the Navy of John Paul Jones, Truxtun, Preble, Decatur, Farragut and Dewey, and the 1958-Navy powered by *Nautilus, Boston, Ranger* and *Gyatt,* the F8U *Crusader,* A3D *Skywarrior,* P2V-7 *Neptune* and P6M *Seamaster, Regulus I* and *II, Terrier, Sidewinder* and *Polaris*—and you.

CHANGING JOBS OF TH

The Navy After the American Revolution

Old Sailing Days of Canvas —Tar—Wood

- *Baatswain's Mate . . . . . Term in use since 1775 Established in 1797
- *Quartermaster . . . . . Term in use since 1798 Act of 1813
- *Gunner's Mate . . . . . Established in 1797
- *Quarter Gunner . . . . . Act of 1797
- *Caxswain . . . . . Established in 1797
- *Carpenter's Mate . . . . . Established 1797
- *Carpenter's Yeaman . . . . Included in Muster Rall of USS *Canstellatian* 1798
- *Master at Arms . . . . . Established in 1797
- *Yeaman af the Gun Raam . Act af 1797
- *Caak . . . . . Established in 1797

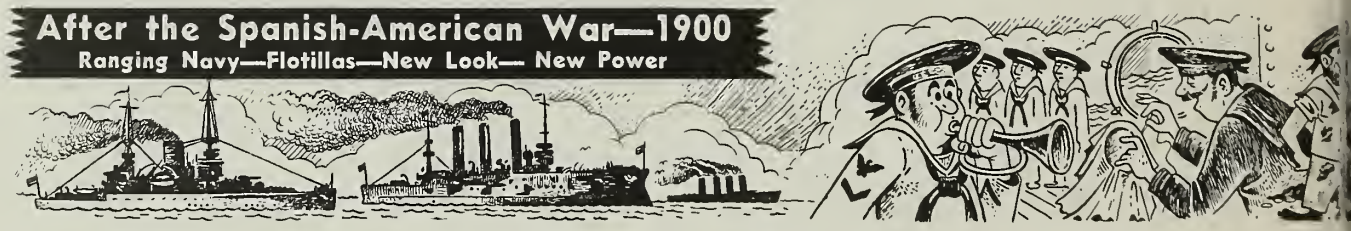
Before and After the Civil War Era

Fading Sails—Steam—Sidewheelers— Iron

- Baatswain's Mate
- Master at Arms
- Gunner's Mate
- Quarter Gunner
- Quartermaster
- Carpenter's Mate
- *Yeaman . . . . . First oppears in 1835 Navy Register, Abolished in 1884, Re-established in 1893
- Painter . . . . . First appears in 1846 Navy Register
- Musician . . . . . First appears in 1838 Novy Register
- Coxswain
- *Landsman . . . . . First appears in 1838 Navy Register, Disestablished during periad 1921–1925
- Ship's Writer
- Ship's Caak . . . . . Established in 1837, Replaced Caak
- Sailmaker's Mate
- *Seaman
- *Fireman . . . . . Established 1842
- *Bay

After the Spanish-American War—1900

Ranging Navy—Flotillas—New Look— New Power



- Baatswain's Mate
- Master at Arms
- Gunner's Mate
- Armorer
- Quarter Gunner
- Quartermaster
- *Signal Quartermaster . . . 1865 Navy Regulations
- Carpenter's Mate
- Yeaman
- Mochinist . . . . . 1866 Novy Register
- Blacksmith
- Cappersmith
- Boilermaker . . . . . Established 1869—Changed ta Machinist Rates 1883—Re-established 1884; Replaced by Bailerman in 1948
- Painter
- Sailmaker's Mate . . . . . Established 1893
- Ship's Caak
- Baker . . . . . Established 1864
- Bandmaster . . . . . Established 1885 Changed fram Master af Bands

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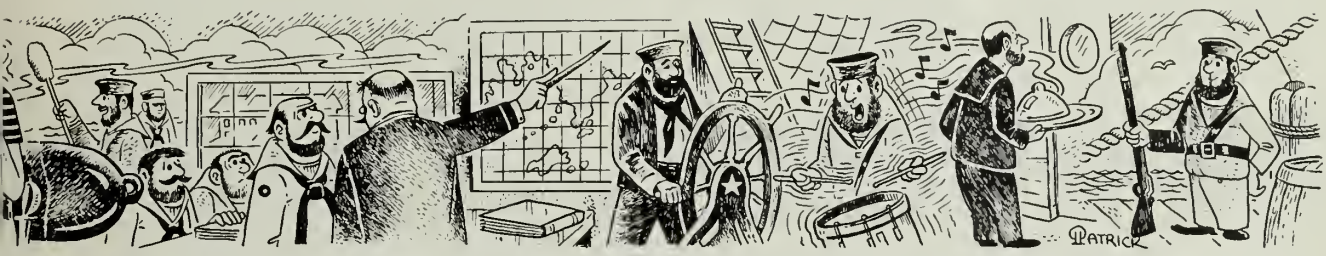
HE U. S. NAVYMAN

*Seomon, Ordinary . . . . . Established in 1797
*Moster's Mote . . . . . Act af 1797
*Caoper . . . . . Act af 1797
*Loblolly Boy . . . . . Included in Muster Rall of USS *Canstellotion* 1798 and USS *President* 1800, 1814 Navy Regulations describes duties

*Boy . . . . . Appears in Muster Roll af USS *Constitutian*, in 1838 and subsequent editions of Navy Register
*Armorer . . . . . In use in 1775
*Sailmaker's Mate . . . . . Act af 1797, Disestablished during period 1921–1925



Armorer's Mate . . . . . 1835, 1836, 1837 Navy Registers
Coptoin of Forecostle . . . First oppeors in 1838 Novy Register
*Coptain of Afterguard . . First oppears in 1846 Novy Register
1st ond 2nd Coptoins of Foretop . . . . . First oppeor in 1835–37 Navy Registers; Da not appeor in 1938 ond Subsequent Records
*Cooper
Coptain of Hold . . . . . First oppears in 1838 Novy Register

*Caal Heaver . . . . . Act of 1842
Master of Bands . . . . . First appeors in 1838 Novy Register
*Officer's Steword . . . . . First oppeors in 1838 Navy Register
*Cobin Cook . . . . . General Order of 1864
Schoolmaster . . . . . Included in Navy Regulations of 1802 and Act of 1813
Ship's Corporal . . . . . First oppeors in 1835 Novy Register
Coptain of Tops . . . . . 1838 Novy Register
Captoin af Mizzentop . . . 1835 Novy Register
*Lomp Cleoner . . . . . Included in SecNov Letter of 1865

Bugler . . . . . Executive Order 1871
Musicion (formerly Bondsmon)
Coxswoin
*Seoman
*Fireman
*Borber . . . . . Changed from Ship's Barber in 1885 Navy Register
*Bayman . . . . . Navy Regs af 1870 states manner af oppaintment
Printer . . . . . Executive Order 1893

*Landsman . . . . . Disestablished 1921–1925
Gun Captain . . . . . Executive Order of 1891
Turret Captain . . . . . Executive Order of 1903
Electrician . . . . . Executive Order of 1883
Seaman Gunner . . . . . Executive Order of 1869
Captain of Foretap . . . . First appeors in 1884 Novy Register
Coptoin of Afterguard

**No rating symbol an record*

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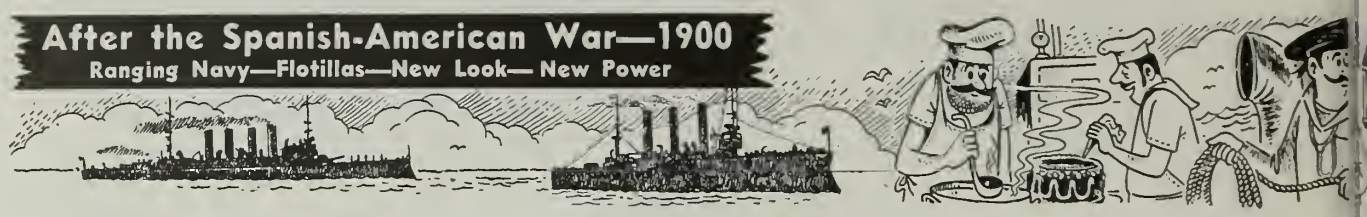
After the Spanish-American War—1900

Ranging Navy—Flotillas—New Look— New Power



- Captain af Maintap . . . . First appears in 1885 Navy Register
- *Carpenter and Caulker . . General Order af 1864
- *Caulker . . . . . Executive Order af 1893
- Water Tender . . . . . Executive Order af 1884
- *Paymaster's Steward . . . General Order af 1861 pravides far pay af Paymaster's Steward—Changed ta Paymaster's Writer in 1867
- Ship's Writer . . . . . General Order af 1864
- *Paymaster's Writer . . . . SecNav Ltr af 1867—changed ta Paymaster's Yeaman in 1870 Navy Regs
- Plumber & Fitter . . . . Executive Order af 1893
- Apathecary . . . . . Changed fram Surgean's Steward in 1866; changed ta Haspital Steward by 1898 Act
- Haspital Steward . . . . . Act af 1898—Changed ta Pharmacist's Mate by Act af 1916
- Haspital Apprentice . . . Act of 1898
- Caxswain ta Cammander in Chief . . . . . General Order af 1864
- *Nurse (Male) . . . . . General Order af 1861
- Oiler . . . . . Executive Order af 1884
- *Lamplighter . . . . . US Navy Regulations Circular af 1885

The Navy in 1925

New Tactics—Surface—Underseas—Air

- Baatswain's Mate
- Coxswain
- Master at Arms
- Turret Captain . . . . . Executive Order 1903
- Gunner's Mate
- Quartermaster
- Special Mechanic . . . . . Established 1917
- Machinist's Mate . . . . . Executive Order 1903
- Printer . . . . . Executive Order af 1893
- Carpenter's Mate
- Water Tender
- Storekeeper . . . . . Established 1916
- Cammissary Steward . . . Executive Order 1902
- Yeaman
- Pharmacist's Mate . . . . Changed from Hospital Steward 1917
- Haspital Apprentice
- Bandmaster, Musician
- Blacksmith
- Cappersmith
- Patternmaker . . . . . Established 1917
- Aeragrapher
- Malder . . . . . Established 1917
- Metalsmith
- Bailermaker

End of World War II—1945

Technical Training Pays Off

- Boatswain's Mate
- Gunner's Mate
- Turret Captain
- Quartermaster
- Mineman . . . . . Established 1943
- Tarpedaman's Mate
- Signalman . . . . . Disestablished in 1948 Re-established 1956
- Fire Cantralman . . . . . Established in 1943
- Radioman
- Radio Technician . . . . . Established 1942
- Radarman . . . . . Established 1943
- Sonarman . . . . . Established 1943
- Saundman Established 1943
- Carpenter's Mate

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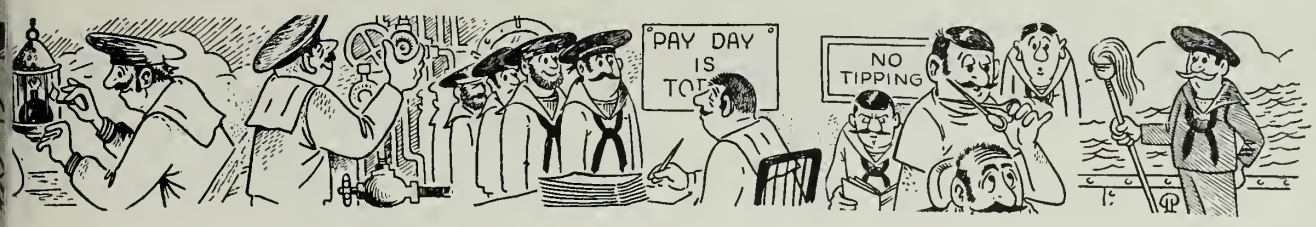
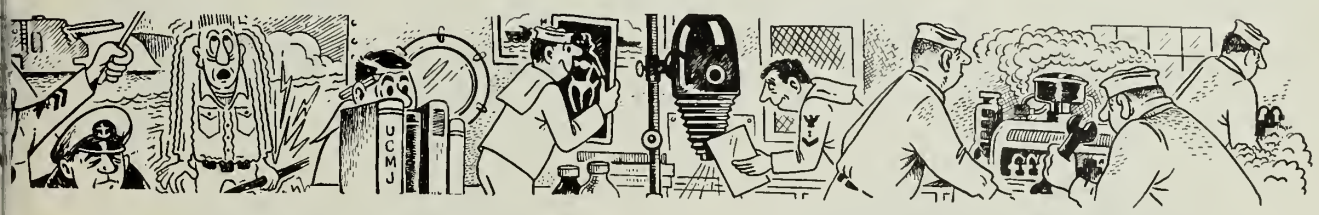


*Mess Attendant . . . . . Executive Order af 1893
*Attendant . . . . . 1885 Navy Regulatians
*Ship's Barber . . . . . 1870 Navy Register
Ship's Baker . . . . . Changed fram Baker 1870 Navy Register
*Tailar . . . . . Changed fram Ship's Tailar US Navy Register 1865
*Jack af the Dust . . . . . 1876 US Navy Regulatians
*Apprentice . . . . . General Order af 1883—Changed ta Seaman, Ordinary Seaman & Apprentice Seaman 1903

*Caal Passer . . . . . Changed fram Caal Heaver by Executive Order af 1893
*Finisher . . . . . General Order af 1880
*Engineer Farce Seaman . . Mentianed in Navy Dept Circular af 1871
Shipwright . . . . . Executive Order af 1893
*Surgeon's Steward . . . . . 1838 Navy Register and General Order af 1861; Changed ta Apathecary 1866
*Writer . . . . . Executive Order af 1893
Ship's Yeaman . . . . . Executive Order af 1883

Engineman . . . . . Established 1917
Painter
Ship's Caak
Baker
Mess Attendant, Steward
Musician
Bugler
Ship Fitter
Signalman
Matar Machinist's Mate
Electrician's Mate
Aviatian Ordnanceman

Aviatian Pilat
Aviatian Machinist's Mate
Radiaman
Tarpedaman
Aviatian Metalsmith
Aviation Rigger
Aviatian Carpenter's Mate
Photagrapher
Fire Cantralman
*Seaman
*Fireman



Ship Fitter
Cappersmith
Metalsmith
Malder
Patternmaker
Special Artificer D. I. O. . Established 1943
Telegrapher . . . . . Established 1926 Autharized enlistment in Naval Reserve anly

Painter
Blacksmith
Machinist's Mate
Matar Machinist's Mate
Electrician's Mate
Water Tender

No rating symbal on recard

cantinued an next page

End of World War II—1945
Technical Training Pays Off

*Fireman

Bailermaker

Aviatian Pilat . . . . . Established 1924

Aviatian Machinist's Mate

Aviatian Electrician's Mate Established 1942

Aviatian Radiaman . . . . Established 1942

Aviatian Radia Technician Established 1942

Aviatian Metalsmith

Aviatian Ordnanceman . . Established 1926

Aviatian Fire Cantralman . Established 1945

Airship Rigger . . . . . Established 1943

Parachute Rigger . . . . . Established 1942

Aeragrapher's Mate . . . . Established 1942

Phatagrapher's Mate . . . Established 1942—Split inta Phatagrapher's Mate and Aviatian Phatagrapher's Mate 1948

Starekeeper

Aviatian Baatswain's Mate Established 1944

Navy of 1958
Electronic—Supersonic—Atomic Navy

DECK GROUP (I)

BM Baatswain's Mate

QM Quartermaster

SM Signalman . . . . . Incarparated in QM 1947 — Re-established 1956

RD Radarman

SO Sanarman

ORDNANCE GROUP (II)

MN Mineman . . . . . Disestablished 1947 Re-established 1948

GM Gunner's Mate

FT Fire Cantral Technician . Established 1948

GS Guided Missileman . . . Established 1953

NW Nuclear Weapans Man . Established 1957

TM Tarpedaman's Mate

ELECTRONICS GROUP (III)

ET Electranics Technician . Established 1948

PRECISION EQUIPMENT GROUP (IV)

IM Instrumentman . . . . . Established 1948

OM Opticalman . . . . . Established 1948

ADMINISTRATIVE CLERICAL GROUP (V)

**TE Teleman . . . . . Established 1948

RM Radiaman

CT Cammunicatians Technician . . . . . Established 1948

YN Yeaman

PN Persannel Man . . . . . Established 1948

MA Machine Accauntant . . Established 1948

SK Starekeeper

DK Disbursing Clerk . . . . . Established 1948

CS Cammissaryman . . . . . Established 1948

SH Ship's Serviceman

JO Jaurnalist . . . . . Established 1948

MISCELLANEOUS GROUP (VI)

LI Lithagrapher . . . . . Established 1948

**PI Printer

DM Draftsman . . . . . Established 1948

MU Musician

ENGINEERING and HULL GROUP (VII)

MM Machinist's Mate

EN Engineman

MR Machinery Repairman . Established 1948

BR Bailermaker . . . . . Re-established 1956

BT Bailerman . . . . . Established 1948

EM Electrician's Mate

IC Interiar Cammunicatians Electrician . . . . . Established 1948

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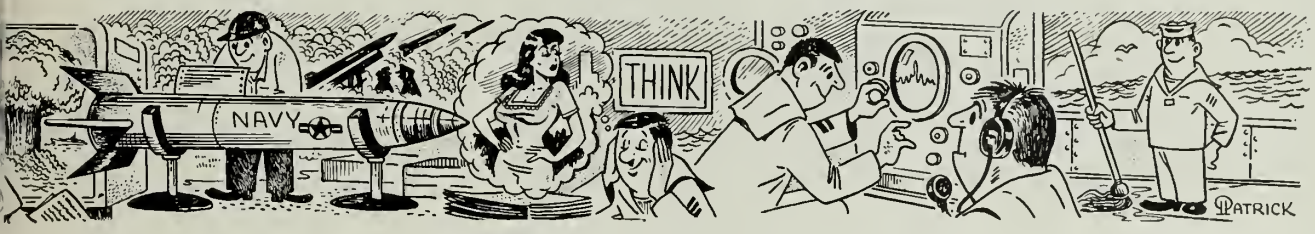
- Printer
- Ship's Serviceman . . . . . Established 1943
- Yeaman
- Hospital Apprentice
- Pharmacist's Mate
- Bugler
- Buglemaster . . . . . Established 1927
- Musician
- Mailman . . . . . Established 1944
- Chief Cammissary Steward
- Baker
- Mess Attendant
- Steward . . . . . Established 1943
- Caak´
- Caxswain

*Seaman



SF Ship Fitter Replaced ME & FP Established 1958

** ME Metalsmith

** FP Pipe Fitter . . . . . Established 1948

DC Damage Cantralman . . Established 1948

PM Patternmaker

ML Malder

CONSTRUCTION GROUP (VIII)

SV Surveyar . . . . . Established 1948

CE Canstructian Electrician . . . . . Established 1958

EO Equipment Operatar (Driver) Est. 1958

CM Canstructian Mechanic Established 1958

BU Builder . . . . . Established 1948

SW Steelwarker . . . . . Established 1948

UT Utilities Man . . . . . Established 1948

AVIATION GROUP (IX)

AD Aviatian Machinist's Mate

**AL Aviatian Electranics Man Established 1948

AT Aviatian Electranics Technician . . . . . Established 1948

GF Aviatian Guided Missileman . . . . . Established 1953

AO Aviatian Ordnanceman

AQ Aviatian Fire Cantral Technician . . . . . Activated 1954

AC Air Cantralman . . . . . Established 1948

AB Aviatian Baatswain's Mate

AE Aviatian Electrician's Mate

AM Aviatian Structural Mechanic . . . . . Established 1948

PR Parachute Rigger

AG Aeragrapher's Mate

TD Tradevman . . . . . Established 1948

AK Aviatian Starekeeper . . Established 1948

PH Phatagrapher's Mate

PT Phatagraphic Intelligenceman . . . . . Established 1957

MEDICAL GROUP (X)

HM Haspital Carpsman . . . Established 1948

DENTAL GROUP (XI)

DT Dental Technician . . . Established 1948

STEWARD GROUP (XII)

SD Steward

***Rating disestablished, but personnel still in rating*

★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★

OVERSEASMANSHIP—A group of Singapore Sea Cadets practice communication on the signal bridge of *USS Bremerton* (CA 130) while anchored in port.

Largest Fighting Squadron

"The largest fighter squadron in the Navy, based on one of the Navy's largest air stations for jets." That's the boast of Fighter Squadron 121 based at NAS Miramar.

With the job of training aviation personnel for the Pacific Fleet, VF 121 at Miramar and VF 121 Detachment Alfa at San Diego's North Island Naval Air Station are kept busy giving countless pilots and enlisted men classroom and operational instructions.

With the exception of personnel arriving directly from basic training centers, it can be said that all officers and men in VF 121 are both teaching and learning—for even the flight leaders and ground instructors are always preparing themselves as well as their charges for Fleet duty.

Known as the "Pacemakers" men of VF 121 lived up to their name during their recent deployment aboard uss *Lexington* (CVA 16), when the operational readiness report was the highest attained in recent years in the Western Pacific.

On this same cruise, VF 124 compiled one of the finest records ever achieved by a deployed all-weather fighter squadron. Since then, however, VF 124 has been absorbed by VF 121, as were segments of VF 122 and VF 143.

YESTERDAY'S NAVY

Construction of *USS Maine* was authorized, 3 Aug 1886. On 6-7 Aug 1943 a task group of U.S. destroyers sank three out of four hostile destroyers intercepted in Vella Gulf, Solomon Islands. The first large-scale amphib invasion of the Pacific took place when the First Marine Division landed on Guadalcanal in the Solomons, 7 Aug 1942. *USS Essex* captured British Sloop *Alert* on 13 Aug 1812. *USS Constitution*, 44-gun frigate, fought one of the most famous battles in naval history and defeated *HMS Guerriere* on 19 Aug 1812. On 20 Aug 1823 *USS Enterprise* captured *HMS Fly*. U.S. Fleet captured Fort Hatteras on 29 Aug 1861.

Tartar in Production

An $8,000,000 contract has been awarded by the Navy for pilot line production of *Tartar* guided missiles. The first of these will be used for testing and evaluation at the Naval Ordnance Test Station, China Lake, Calif., and aboard uss *Norton Sound* (AVM 1), before they are placed in full production.

Tartar is the newest and smallest of the Navy's guided missiles in the surface-to-air category. It is designed for use on destroyers and for secondary batteries aboard cruisers. The first ships to be *Tartar*-equipped will be destroyers in the current shipbuilding program.

The new missile is described as a junior version of *Terrier* which was the Navy's first operational surface-to-air missile. In spite of its small size, *Tartar* will have superior performance to that of the first operational *Terrier* missiles. Like *Terrier*, it will be a solid propellant rocket.

Production versions of *Tartar* will be installed in 13 guided missile destroyers, now being built, and in three heavy cruisers, uss *Chicago* (CA 136), *Albany* (CA 123) and *Fall River* (CA 131), which will be converted into missile ships.

Fightingest Flattop's Farewell

One of the most famous of the Navy's World War II aircraft carriers, uss *Enterprise* (CVS 6), is on her way to the scrap heap.

Described as "the fightingest carrier in the Fleet" (see All Hands, February 1956, pp. 59-63), *Enterprise* saw action in nearly every major battle in the Pacific, earning 20 out of a possible 22 battle stars for carrier action in that area during World War II.

During that war, squadrons from *Enterprise* accounted for 911 enemy aircraft, 71 enemy ships sunk, and another 192 enemy ships damaged or probably sunk. At one time, she was the only U. S. aircraft carrier operating in the Pacific. She was reported sunk by the Japanese on seven different occasions.

The keel of *Enterprise* was laid 16 Jul 1934 at Newport News, Va. She was launched 3 Oct 1936 and com-

missioned 12 May 1938. She had an over-all length of 827 feet, a beam of 114 feet and a standard displacement of approximately 21,600 tons.

Authority to scrap the *Big E* was granted in January 1957, but no date was set at that time. In April, SecNav Thomas B. Gates, Jr., ordered that the scrapping program be delayed in order that the Enterprise Association might have additional time to raise funds to preserve the ship as a national shrine.

The Enterprise Association was composed of some 1400 ex-crew members of the ship and was headed by FADM William F. Halsey, Jr., USN (Ret). The group campaigned to raise the necessary funds—an estimated million dollars—to save the ship from the scrap pile, but ill health forced Admiral Halsey to abandon the effort before the money was obtained.

Lure of the Polar Country

Although a radioman first class, Russel L. Dehetre, USN, can also qualify as a First Class Polar Explorer. Fourteen trips to the Arctic and three to the Antarctic lend weight to his argument.

In addition to this distinction, he may also have another claim—service aboard an icebreaker longer than any other Navyman.

Dehetre, who is petty officer in charge of USS *Atka's* (AGB-3) radio shack is completing his seventh year of duty aboard the Seattle-based icebreaker.

According to his statistics, Dehetre figures that he has sent out approximately 4000 messages and has received at least 8000. During his *Atka* duty, he has seen some 1600 shipmates come and go, served under five skippers, four execs, and six division officers.

Statistics-conscious, he estimates that he has stood in *Atka's* chow line 7000 times, more or less, since 1951.

South Atlantic Force

A new antisubmarine command, the South Atlantic Force, has been established with headquarters afloat. The permanent duty station of the staff of the Commander, South Atlantic Force will be the U. S. Naval Station at Trinidad.

The new force, commanded by RADM E. C. Stephan, USN, will be responsible for naval tasks in the area consisting principally of all of the South Atlantic Ocean. Its principal task will be to carry out United States responsibility in the field of ASW, shipping protection, and other defense missions.

Initially, the 2650-ton destroyer, USS *Jonas Ingram* (DD 938), will be assigned as flagship.

FRIEND-SHIP—Australian Ambassador Howard Beale presents silver tray to USS *Canberra* (CAG 2) in Norfolk as a token of friendship of his people toward the guided missile cruiser which is named after Australia's capital.

Bullpup Hits Bull's-Eye

The accuracy and reliability of the guided missile *Bullpup* was demonstrated recently when a Navy test pilot destroyed a four-inch target two miles away.

LT L. Wayne Smith, USN, a 1950 graduate of the Naval Academy, scored the impressive bull's-eye on his first shot with the 1300 mph. air-to-surface missile. Containing an inert warhead, the *Bullpup* destroyed the target, a four-inch square smoke pot. The shot was made in the North Atlantic during severe cold weather tests of the missile aboard the attack aircraft carrier USS *Franklin D. Roosevelt* (CVA 42).

The 11-foot-long missile weighs 540 pounds, is relatively inexpensive, and simple in design. Carried under the wings of carrier-based aircraft, *Bullpup* is intended for use against comparatively small targets — pillboxes, tanks, truck convoys, bridges, railroads and yards.

Course for Future Rocketmen

ComCruLant has launched what is believed to be the first Rocket Safety Program conducted for civilian educators and high school students.

This program, pioneered by RADM Lewis S. Parks, USN, was presented at the Norfolk Naval Station theater. It was conducted by rocket experts from ComCruLant staff, the Special Weapons School of the Atlantic Fleet Training Command, and the guided missile cruiser USS *Boston*.

FASRON 121 finally gets home at Chincoteague, Va. *Left:* New hangar. *Rt:* Temporary home at Puerto Rico in '53.

FASRon 121 Finds a Home

After seven years of wandering, Fleet Aircraft Service Squadron 121 (FASRon) has finally found a home. The unit has moved into modern quarters in a brand-spanking-new hangar at the Naval Air Station, Chincoteague, Va.

This is the FASRon's first permanent home since back in January 1951 at New Orleans, La., where the squadron was known as Reserve FASRon 821. The Korean conflict caused the FASRon to move to NAS Jacksonville, Fla., where it remained a month before being assigned NAAS Sanford, Fla., as its homeport. There the squadron assisted the Public Works Department in preparing the station for commissioning. Carrier Air Group Three arrived at Sanford in April 1951 and was supported by the FASRon until late 1952.

In February 1953 CNO again directed a change of home port, this time to Oceana, Va., and 700 numbers were dropped off the squadron designation making it FASRon 121. This was the first of three name changes that the squadron was to undergo during its 10,000 miles of wandering.

Supplemented with additional personnel, including a detachment of SeaBees, the FASRon set out to investigate the feasibility of a self-supporting activity which could provide support to patrol aircraft for short periods of time. Such an activity would have to operate without the benefit of regular shore establishment facilities and logistics. This explains the need for construction personnel.

Assigned to provide this type of support to aircraft involved in Operation Springboard 1953, 121 moved to Vieques Island in the Caribbean. The planes supported by the squadron operated from a barren airstrip and for three months FASRon personnel lived in tents.

Half of FASRon 121 next went to Chincoteague. The other half was deployed to Nassau, B.W.I., in support of an Atlantic Fleet operation. In the middle of 1954 the squadron underwent another name change, this time becoming Mobile FASRon 121 and — to prove its mobility — it moved to Roosevelt Roads, Puerto Rico. "Home" this time was a tent city which included a field hospital, a dentist's office and a disbursing office.

The trip back to Chincoteague and another name change came about in July 1955. The "Mobile" was dropped from its name and FASRon 121 settled down in its permanent quarters. Renovated barracks were used for administrative spaces and Butler huts for working spaces, but no hangar facilities were available.

Another deployment took the air unit back to Roosevelt Roads and upon their return to Chincoteague, FASRon 121 became oriented in the support of Attack Mining Squadron 13. While supporting this P2V squadron, the men of FASRon 121 kept a watchful eye on the construction work progressing near their makeshift working spaces. Finally this spring, after seven years of waiting, FASRon 121 has moved into a place it can truly call home, a brand new hangar complete with the latest facilities.

At last FASRon 121 can say, "I found a home in the Navy."

Good Year's Work for *Salem*

When the heavy cruiser, USS *Salem* (CA 139) gave up her duties as flagship of the Sixth Fleet to USS *Des Moines* (CA 134) this spring, her log showed a good year's work.

In 1957 Vice Admiral Charles R. Brown, Commander of the Sixth Fleet, left and returned to his flagship at sea no less than 107 times by helicopter. He was transferred from *Salem* to other ships and back by highline 43 times.

In checking the log, *Salem's* navigator LCDR Claude L. Tyler found that 1035 passengers arrived aboard *Salem* by helicopter and 805 departed that way. The whirlybird, an HUP-2, was launched and recovered 772 times.

Traveling by copter, highline, small boat—or just walking down the accommodation ladder—1067 men were transferred from duty in 1957, while 807 came aboard to replace them. Some of this changing was done at sea, some in port.

Salem came alongside other ships 355 times at sea. Only 291 of these approaches were made in daylight. After dark, she eased up to ships 64 times in 1957 with nary a scraped side.

Besides transfer of personnel, ships alongside replenished fuel, stores, and ammunition.

Salem took aboard 29,029 tons of fuel oil in the 73 hours she spent running along with tankers of the Fleet. During 61 hours alongside supply ships, *Salem* took on 1300 tons of provisions, 250 tons of Fleet freight, and 375 tons of miscellaneous items.

From ammunition ships *Salem*

took aboard 84.7 tons of powder and shells in 11 hours of operations.

All these "gimme" operations were held at sea, keeping ship and crew in readiness should they be unable to depend on shore bases for supplies. But *Salem's* 1957 was not all spent in receiving.

The 716-foot armor-plated cruiser doled out 469 tons of fuel oil to 29 destroyers. What she didn't give out, she consumed, and this is a breakdown on how she did it:

Last August, when the Sixth Fleet hovered off the Middle East, *Salem's* log turned up 7733 sea miles for the month. Her lightest month for steaming was December, with 2604 miles. For the entire year she logged 53,076 nautical miles, more than twice around the world, or 27 times the length of the Mediterranean Sea.

For this steaming, *Salem* stayed inside the Mediterranean except for one visit to Lisbon, Portugal, in August. In the same month she stopped at Gibraltar, westernmost point in the Med, and in November it was Beirut, Lebanon, at the eastern end. She touched at Malta and Crete, Sicily, Sardinia, Corfu, Rhodes, and Majorca, all Mediterranean islands. She also visited the African ports of Tripoli and Tobruk in Libya.

Navy's Electra

The Navy has selected a new four-engine turboprop aircraft for future ASW duties.

The new plane, known as the *Electra,* will eventually replace the famous P2V *Neptune* series. It is powered by four T-56 turboprop engines, will carry a crew of 10, and will be equipped with latest instrumentation for the detection and destruction of enemy submarines.

The *Electra* was determined to be the one plane that most nearly filled the requirements of the Navy for a land-based ASW aircraft. A research and development contract for a "mock up" model and further outfitting study will be awarded shortly.

By considering only planes already developed, the Navy was able to save time and money in ultimate delivery of the aircraft to the operating forces. A commercial version of the *Electra* will enter service this fall.

Aid in Copter Landings

An anemometer-windsock, recently developed by an HU-2 pilot, will help the hard pressed helicopter pilot get his bucking bronco on the deck more safely.

Originated and tested by LT R. F. Bennie, officer-in-charge of HU-2 Detachment 42, while aboard uss *Forrestal* (CVA 59), the windsock will assist in determining unsafe conditions caused by turbulent winds passing over the ship's hurricane bow, deck edge, island structure and aircraft parked on the flight deck.

The device was designed particularly for helicopter landing and for rotor engagements and disengagements. It will give the helicopter pilot and the ship's air officer an indication of the winds at the landing spot and help prevent possible landing accidents or blade flapping mishaps.

The winds well above the flight deck, as shown by the ship's anemometers, have been found to vary markedly from the turbulent winds existing on the flight deck itself. Up to now, no reliable indication of the actual landing conditions has been available.

The device consists of a dual windsock. Each windsock is calibrated to stream out horizontally only when a predetermined wind velocity is reached.

The green sock will stream when the wind reaches the maximum recommended wind for rotor engagement or disengagement. The red sock will stream when the maximum allowable wind is reached or exceeded. The socks also show direction of the relative wind and to some degree, indicate the extent of existing turbulence.

Triple-A Shellbacks

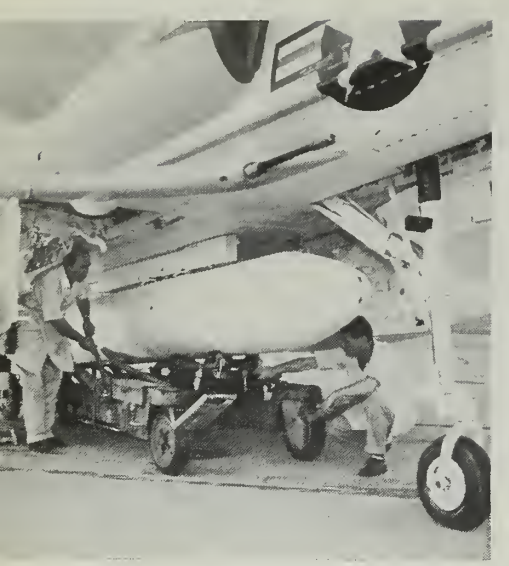
Crossing the equator is an event worthy of recognition and celebration aboard any ship but crossing it three times in one day while submerged is something else.

The officers and crew of uss *Menhaden* (SS 377) claim this distinction and have proclaimed themselves as "Golden Shellback Snorkelers."

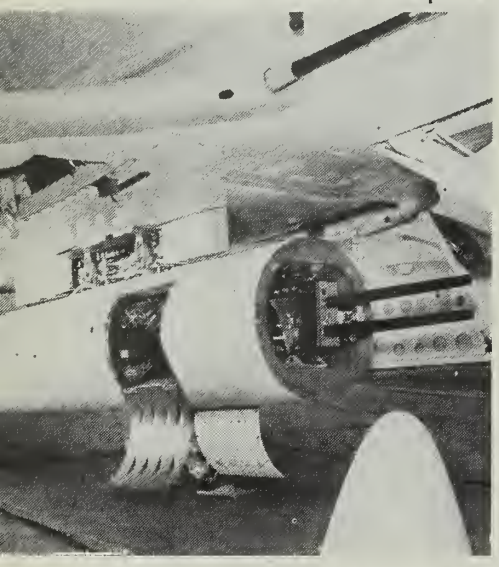
Menhaden crossed the International Dateline at the Equator (Latitude 00-00, Longitude 180-00 East and West) then backed down and repeated the performance. This feat took place while the guppy sub was en route from Newcastle, Australia, to Pearl Harbor.

In addition to visiting Australia and Pearl Harbor, the San Diego-based sub also visited Yokosuka, Japan; Subic Bay, P. I.; and Hong Kong, B.C.C., during the cruise.

ON ICE—*USS Kankakee* (AO 39) waits for help from Canadian icebreaker while on duty in the ice-filled Arctic waters.



NEW GUN-IN-POD is mounted to bomb rack and carried outside plane.



New Automatic Gun For Navy

A new double barreled 20mm automatic gun, with eight times the firing rate of its World War II counterparts, has been unveiled by the Navy. Designated the Mark 11, this new weapon is carried and fired in an external pod which is attached to the bomb rack of naval fighter and attack aircraft.

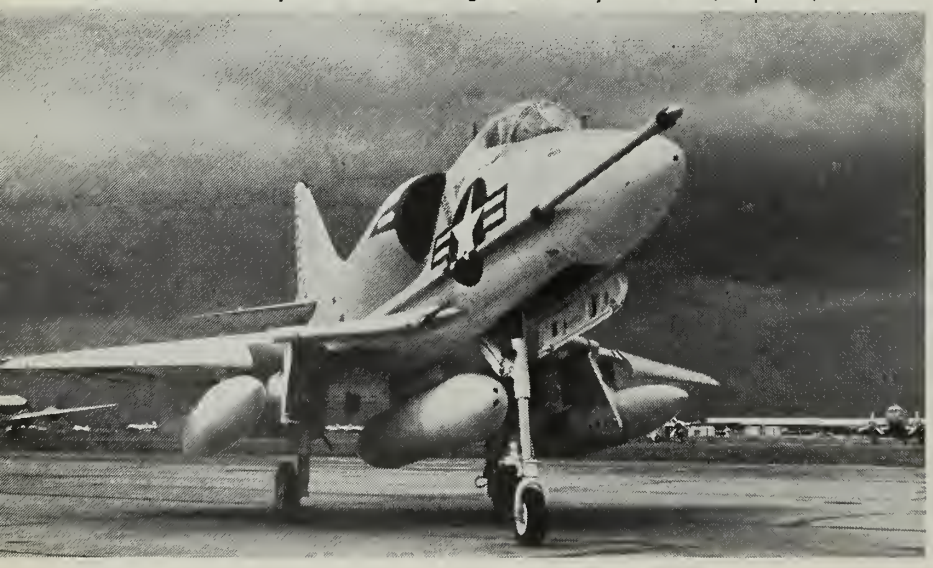
Two of these pods and guns can equip a plane with the firepower of 16 World War II 20mm guns. The weapon was designed by the Bureau of Ordnance. Air firing evaluation flights of the gun pod are being conducted at the Naval Aviation Ordnance Test Station, Chincoteague, Va.

The Mark 11's high rate of fire (4800 high explosive rounds per minute) is achieved by using a single revolver cylinder to feed rounds to both barrels. Expended ammunition cases are ejected as a package at high velocity from the rear of the gun, passing through ejection ducts out of the bottom of the pod.

This weapon fires more rounds per minute per pound of gun weight than any other aircraft gun in existence. Use of a variable-rate-of-fire control box in the pod makes it possible to select a rate of fire appropriate to the target and the tactical situation. This characteristic permits the pilot to use his ammunition sparingly until he gets on the target, at which instant the maximum rate of fire may be selected and immediately attained on the next rounds fired.

The pod increases the variety of interchangeable armament on the aircraft, adding guns to weapons already customarily carried externally such as rockets, guided missiles and bombs. It can be attached or removed in a short time and can be jettisoned by a pilot in flight if necessary.

PODS ENOUGH—An A4D-2 poses with 20mm cannon in its pod. External pod that makes plane structure lighter is easy to rearm, replace, maintain.



Another First for *Cimarron*

The 213 officers and enlisted men of "Big Cim" (USS *Cimarron*, AO 22), report that they have noted with considerable interest the statement in an earlier issue of ALL HANDS that the average donation of SubRon Three to the Memorial Stadium Fund was over $2.00 per man.

"What," they want to know, "do you make of our contribution? To date, we have chipped in some $1641.38 which, according to our figures, amounts to $7.71 per capita. Furthermore, we collected this in something less than a month. Any worthwhile comments?"

All we can do is mumble something about "Another first for *Cimarron*" and bow our heads in respect.

We should like to point out to our readers, however, that *Cimarron* has been well in the lead in any worthwhile naval endeavor for some little time. Few ships can lay claim, as does *Cimarron*, to having participated in almost every major naval operation in the Pacific through World War II—and still remain in active operation.

During its years of war, the ship has never suffered casualties or damage—which is a good thing, because *Cim's* usual load is more than four million gallons of fuel, including 420,000 gallons of aviation gasoline.

During the Korean episode, *Cimarron* replenished more than 200 different United Nations ships in over 600 fuelings. During this two-and-one-half-year period, she pumped two million barrels of fuel oil (at 42 gallons per barrel), and five million gallons of aviation gasoline. She also transferred hundreds of men, thousands of bags of mail, several hundred tons of freight and provisions, and countless bevies of drums of lubricating oil to ships while steaming underway.

Under the circumstances, it's not unusual that *Cim* should turn in a worthwhile job on the Navy and Marine Corps Memorial Stadium Fund.

To see how your outfit will stack up with other activities afloat, check the next page.

Teamwork Does the Spade Work for Navy-Marine Memorial

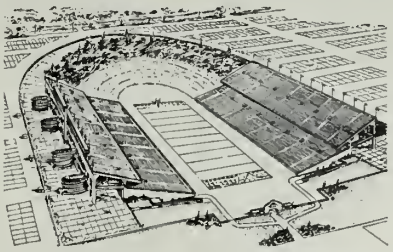
With some $148,000 yet to go, construction of the Navy-Marine Corps Memorial Stadium at the Naval Academy, Annapolis, Md., is well under way.

The facade is to be adorned with memorial plaques and the balconies of the stadium will depict famous battles such as Belleau Woods, Midway, Tarawa, Coral Sea, Iwo Jima and Inchon. State flags will fly from its highest points.

Memorial chairs dedicated to date range from seamen to the President and from John Paul Jones to midshipmen of the class of 1961. As the stadium is to be regarded as a living memorial, chairs may be dedicated—for a donation of $100—to any Navyman or Marine whether living or dead. The brass plate on the back of the chair may contain four lines of engraving, with a maximum of 25 letters and spaces per line.

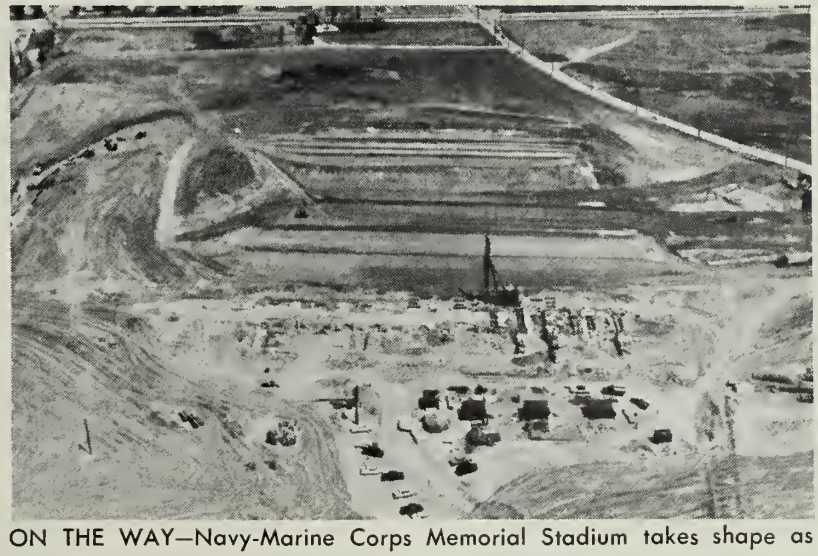
Navy and Marine forces afloat and ashore have contributed generously to meet the $2,900,000 needed. Here's a list of the leading contributors afloat:

AirLant	
USS *Lake Champlain* (CVA 39)	$7003
USS *Essex* (CVA 9)	6923
USS *Saratoga* (CVA 60)	4276
USS *Forrestal* (CVA 59)	3460
USS *Randolph* (CVA 15)	3252
Special FASRan 200	446
FLogWingLant VR-24	2365
FLagWingLant VW-13	612
PhibLant	
USS *Spiegel Grove* (LSD 32)	$1225
USS *Olmstead* (APA 188)	981
USS *Mount McKinley* (AGC 7)	688
USS *Pocano* (AGC 16)	615
USS *Wahkiakum County* (LST 1162)	549
USS *Waldo County* (LST 1163)	505
BatCruLant	
USS *Des Moines* (CA 134)	$3480
USS *Albany* (CA 123)	3001
USS *Canberra* (CAG 2)	2938
USS *Salem* (CA 139)	2662
DesLant	
USS *Yellowstone* (AD 27)	$2300
USS *Shenandoah* (AD 26)	1050
USS *Charles S. Sperry* (DD 697)	1077
USS *Myles C. Fox* (DDR 829)	1603
USS *Robert H. McCard* (DD 822)	1020
USS *Gatling* (DD 671)	1006
MinLant	
USS *Observer* (MSO 461)	$ 708
USS *Salute* (MSO 470)	470
ServLant	
USS *Mauna Loa* (AE 8)	$2797
USS *Great Sitkin* (AE 17)	677
USS *Elokomin* (AO 55)	1527
USS *Salamonie* (AO 26)	1435
USS *Mississinewa* (AO 144)	896



ARTIST'S drawing shows completed stadium now under construction.

USS *Marias* (AO 57)	883
USS *Aucilla* (AO 56)	750
USS *Aldebaran* (AF 10)	345
USS *Cadmus* (AR 14)	1002
USS *Amphion* (AR 13)	840
USS *Tutuila* (ARG 4)	461
USS *Tanner* (AGS 15)	431
Cargo Handling Bat. No. 1	500
Mobile Construction Battalion No. 4	428
SubLant	
USS *Cobbler* (SS 344)	$ 590
USS *Sea Cat* (SS 399)	515
USS *Orion* (AS 18)	666
MSTSLant	
USS *Corregidor* (T-CVU 58)	$ 766
FMFLant	
Second Marine Aircraft Wing	$12,987
Second Marine Division	2430
Force Troops	1815
AirPac	
USS *Hancock* (CVA 19)	$12,380
USS *Hornet* (CVA 12)	12,200
USS *Ticanderoga* (CVA 14)	8474
USS *Philippine Sea* (CVS 47)	7883
USS *Kearsarge* (CVA 33)	6734
USS *Salisbury Sound* (AV 13)	1551
USS *Kenneth Whiting* (AV 14)	1453
COD Unit No. 21 (Japan)	708
Air Antisubmarine Squadron 21	475
Electronic Countermeasure Squadron 1	439
Attack Squadron 126	435
CruDesPac	
USS *Toledo* (CA 133)	$2347
USS *Bremerton* (CA 130)	2320
USS *Rochester* (CA 124)	2147
USS *Saint Paul* (CA 73)	2064
USS *O'Brien* (DD 725)	4029
USS *Walke* (DD 723)	3840
USS *Harry E. Hubbard* (DD 748)	3313
USS *Ernest G. Small* (DDR 838)	3805
USS *Nicholas* (DDE 449)	1659
USS *Eversole* (DD 789)	1571
USS *Higbee* (DDR 806)	1292
USS *George A. MacKenzie* (DD 836)	1211
USS *Spangler* (DE 696)	400
PhibPac	
USS *Bexar* (APA 237)	$4032
USS *Carter Hall* (LSD 3)	2957
USS *Mathews* (AKA 96)	2659
USS *Talladega* (APA 208)	1420
SubPac	
USS *Sperry* (AS 12)	$1744
USS *Nereus* (AS 17)	1724
USS *Wahoo* (SS 565)	1370
USS *Salmon* (SSR 573)	1121
USS *Catfish* (SS 339)	816
MinPac	
USS *Impervious* (MSO 449)	$ 464
USS *Loyalty* (MSO 457)	446
ServPac	
USS *Cimarron* (AO 22)	$1685
USS *Taluga* (AO 62)	305
USS *Aludra* (AF 55)	593
USS *Regulus* (AF 57)	546
USS *Ajax* (AR 6)	811
USS *Luzon* (ARG 2)	428
USS *Castor* (AKS 1)	442
Mobile Construction Bat. No. 3	332
Mobile Construction Bat. No. 5	300
MSTSPac	
USS *Gen. W. A. Mann* (T-AP 112)	$ 375
USNS *Gen. Edwin D. Patrick* (T-AP 124)	348
FMFPac	
Third Marine Division	$16,560
First Marine Aircraft Wing	2258



ON THE WAY—Navy-Marine Corps Memorial Stadium takes shape as foundation is laid for stands. Fund drive needs $148,000 to complete job.

FUN FOR ALL—Mobile Construction Bat. 11 at Cubi Point held a 'Seabee-Scout Day,' playing host with entertainment and chow for 176 local Scouts.

New All-Jet Training Program

Forrest Sherman Field at NAS Pensacola, Fla., was the scene of the launching of the first carrier jet aircraft ever to be used in basic training in the Naval Air Training Command. The flight, made in the T2V *Sea Star* jet trainer, introduced the Navy's new all-jet training program.

Chief of Naval Air Training, VADM Robert Goldthwaite, USN, present for the occasion, greeted Naval Aviation Cadet Preston H. Lineberger and his instructor LT J. R. Tappan who made the introductory flight. He said: "I consider this flight to be the dawn of an entirely new era in naval aviation training. Good luck to both of you."

An evaluation program to determine the feasibility of training all flight students from the ground up in jet aircraft is currently being conducted. It is expected that all future jet attack and fighter pilots will be trained in high performance jet aircraft in the Basic Training Command.

At present there are, in addition to NavCad Lineberger, 13 other students going through this evaluation program. These fourteen students had a total of 40 hours each at Saufley Field in the T-34 *Mentor* before reporting to the new jet unit at Sherman Field. By the end of the year, flight students will begin their primary training in the TT-1 *Pinto* jet.

Basic training will be taken in the T2V and students will complete their advanced training in the F9F-8 *Cougar*.

The T2V is a low, straight wing plane with tandem seats, capable of speeds in excess of 500 knots and it can operate comfortably at altitudes above 40,000 feet. The *Sea Star* is also configured for use in qualifying students aboard aircraft carriers.

The basic jet syllabus is a six-month program, with all training done on one field and in one type of aircraft prior to a student's entering the advanced training phases and flying transonic aircraft. The first two weeks will consist of extensive ground school followed by training conducted on wing and wing basis, with half a day of academic instruction and the other half spent in flight.

The academic phase of instruction will incorporate classes such as aerology, communciations, engineering, principles of flight and special weapons, as well as other courses pertinent to all Navy officers.

The flight phase will consist of 120 hours, 77 of which will be in dual flights. The student will be trained in various facets of flying: aerobatics, radio instruments, night and day navigation, formation flying and carrier qualifications. These two phases will be augmented by 50 hours of flight support classes, including instruction in rules, safety, and noise reduction, principles of flight and emergency procedures.

'Seabee-Scout Day'

The Seabees of Mobile Construction Battalion 11 at Cubi Point in the Philippines held a "Seabee-Scout Day" and played host to 176 Cub Scouts and Boy Scouts from Olongapo, Zambales. The scouts, ranging in age from six to 17, were treated to a good old-fashioned picnic with hot dogs and all the trimmings.

The Scouts made a grand entrance onto Subic Bay's Naval Station, marching in single file while whistling "Colonel Bogey's March." They watched as the Seabees roared heavy equipment back and forth, demonstrating the necessary steps in road construction. Then the youngsters put on a performance with their Drum and Bugle Corps, while well-trained, high-stepping Scouts drilled in real military fashion.

There were foot races and prizes, a guided tour of airplanes and a ship, followed by a picnic. Hot dogs, beans, ice cream and well over 100 gallons of pineapple punch were downed by the group.

When the day ended, the tired but happy group of Scouts didn't quite have the "kick" left to march as lively as they had earlier in the day. But they did manage a friendly wave of "Good-bye" as they trudged on toward their homes.

Outstanding Airmanship

A Naval Aviation Cadet who on his first flight in an F9F-2 *Panther* jet fighter suffered two flameouts at low altitudes, but was able to relight his engine and make a precautionary arrested landing, received a commendation and a "Well Done" for his outstanding performance during a flight emergency.

He is NavCad Claude D. Wilson, Jr., who faced one of the worst situations a pilot can run up against—a low altitude loss of power.

It all happened shortly after Wilson became airborne on his first flight in a *Panther* jet. He experienced a loss of power and engine failure and attempts to obtain a "quickie" relight in the primary system failed. Noting the failure, he switched to the emergency system and the relight was successful.

Climbing for altitude, Wilson's plane again lost power and flamed out. Another attempt for relight was successful and he began setting himself up for a precautionary flameout landing at Sherman Field.

Using the arresting gear, Wilson made a normal landing.

Bremerton's Good Sports

For the third consecutive year, the heavy cruiser USS *Bremerton* (CA 130) has been awarded the CruDesPac Athletic Excellence Trophy.

The latest award was presented, appropriately enough, at a boxing smoker on the fantail while she was operating in the South China Sea.

Bremerton's well rounded athletic program, including intramural contests both ashore and aboard ship, is continuing during 1958 even when cruising the Western Pacific as a unit of the U. S. Seventh Fleet. In addition to tournaments in softball, basketball, bowling, tennis and golf, *Bremerton* teams, nicknamed the "Ambassadors," compete with local basketball and softball teams whenever the ship is in port.

While visiting Singapore, the heavy cruiser's fire controlmen whipped *Bremerton's* Marine Detachment 13—8 in a fund-raising softball game that was played on the broad green esplanade in front of government buildings in that British Crown Colony.

The hard fought game played before a rain-soaked crowd of several hundred local spectators netted more than two thousand dollars for the Navy-Marine Corps Memorial Stadium being erected at Annapolis.

Columbus Scores in Gunnery

The heavy cruiser USS *Columbus* (CA 74) was recently awarded six gunnery efficiency E's as a result of a firing exercise conducted this spring off the coast of Southern California.

Her mark — says *Columbus* — stands as the highest achieved so far this year among the nine Pacific Fleet cruisers. A clean sweep was made by the warship's three 8-inch turrets. All three got an E. The other three awards went to mounts 51, 53 and 54.

Official word gives most of the credit to the individual turret and mount captains for the winning of these efficiency awards. Without their alertness and ability, these excellent scores could not have been accomplished.

Captains of turrets 1, 2 and 3 are Robert W. Hager, GM1; Victor Miller, GM1; and A. E. Reid, GM1. Captains of mounts 51, 53 and 54 are A. R. Ledbetter, GM1; S. A. Goodhue, BM1; and Van Soest, GM1. The Gunnery Officer of *Columbus* is LCDR W. C. Grace.

SIDELINE STRATEGY

TO THE NAVY'S top scattergun ace, winning trophies is like adding water to the ocean. In less than a week, Ken Pendergras, AEC, USN, added more than eight trophies as well as national and international skeet shooting honors to his already enormous collection.

This year he was named—for the third year in a row—on the All-American first team chosen by a leading outdoor sports magazine. At the same time as this announcement, he won the Inter-American All-Gauge Open Championship and eight more trophies.

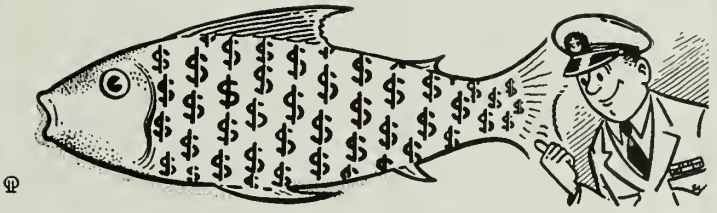
Competing against 85 top shooters from the U. S. and nine Latin American countries, Chief Pendergras knocked down 150 clay pigeons out of 150 in the Inter-American Open Championship at San Juan, Puerto Rico. In other competition at that meet, he was runner-up in the 20-gauge match with a score of 97 x 100; third in the 410-gauge championship with 90 x 100; and second in the High Overall Score for the meet with 337 x 350. In team competition he paired off with Ed Docherty of Massachusetts to capture the Two-Man Inter-American All-Gauge Championship with 398 x 400.

Pendergras is assigned to the "Hurricane Hunters" of Airborne Early Warning Squadron Four based at NAS Jacksonville. During competition in 1957, he had the highest average in the nation—with a 97.9 mark on 1500 registered targets—among 20-gauge gunners. In All-Around Competition, the international champ placed fifth in the nation when he finished the season with a mark of 97.7 on All-Bore clays.

★ ★ ★

In the September '57 Sideline Strategy credit was given to Harry S. Bonner, YNC, USN, of the Security Department, NTC San Diego, for making a catch that even the most experienced fisherman would take pride in making. When that story was published, we didn't know if Bonner's catch was a case of beginner's luck or that of an experienced angler. We know now.

According to information recently received from Chief Bonner, we found out that in national fishing contests in the past three years, he has won cash awards totaling more than $1000. At that rate, instead of being Chief Bonner's favorite pastime, fishing can also be classed as an added source of income. Last year, for instance, he hauled in more than $900 in cash and numerous equipment prizes. It looks as if 1958 is going to be a banner year too, as already he has been awarded a new station wagon, two outboard motors and more than $700 in cash awards.



So you see, all this is far from beginner's luck. According to his accurately recorded fishing log, he lured 2127 fish to his hooks in 104 fishing trips. This goes to prove that just as with any other form of talent the art of fishing takes a lot of practice.

—H. George Baker, JOC, USN.

THE WORD

Frank, Authentic Advance Information On Policy—Straight From Headquarters

• **INSIGNIA FOR E-8, E-9**—You'll have no trouble distinguishing the new Senior and Master Chiefs.

Chiefs in pay grade E-8 (Senior) will wear a rating badge consisting

Senior Chief Grade E-8 | Master Chief Grade E-9

of the present CPO's rating badge with one star worn above the eagle's head.

Chiefs in pay grade E-9 (Master) will also wear the present CPO rating badge but two stars, arranged horizontally above the eagle's wings, will be added.

This change, which has been approved by the Secretary of the Navy, will be incorporated in a future change to *U. S. Navy Uniform Regulations*.

• ***USS ARIZONA MEMORIAL***—The Navy—in a nationwide public appeal—is seeking contributions to raise $500,000 for the construction of a memorial and museum to be located on or adjacent to the hulk of USS *Arizona* at Pearl Harbor, T.H.

Sunk during the 7 Dec 1941 attack on Pearl Harbor, the battleship *Arizona* still remains in her watery grave with 1102 Navy and Marine Corps personnel entombed. The site is now marked only by a wooden platform and bronze plaque erected over the still visible portions of the rapidly deteriorating superstructure.

Plans for providing a permanent memorial structure for *Arizona* and her crew, in keeping with other monuments to our war dead, were provided for in Public Law 85-344 signed by the President on 15 Mar 1958. This law authorizes the Secretary of the Navy to:

• Accept contributions for the construction of a memorial and a museum to be located on the hulk of the United States Ship *Arizona* or adjacent U. S. property in Pearl Harbor, T. H.

• Authorize Navy activities to furnish material to the Pacific War Memorial Commission for use in national promotion of a public subscription campaign to raise funds for the *Arizona* Memorial.

• Authorize Navy activities to assist in conceiving a design and in determining the construction cost for the memorial.

• Undertake construction of the memorial and museum when sufficient funds have been subscribed for completion of the structure.

• Provide for maintenance of the memorial and museum when completed.

The Pacific War Memorial Commission was created by the Hawaiian legislature in 1949 in an effort to bind together several historic sites in Hawaii into a Pacific Memorial System. The remains of the battleship *Arizona* will represent the Pearl Harbor terminus of this system. The Hawaiian legislature further empowered the Pacific War Memorial Commission to raise funds by public subscription for construction of a permanent *Arizona* Memorial.

SecNav Notice 5340 of 16 May 1958 requests commanding officers to assist the Pacific War Memorial Commission and its representatives in conceiving an appropriate design for the *Arizona* Memorial and Museum and assist in raising the funds needed to build it.

Contributions should be mailed directly to: *USS Arizona* Memorial Pearl Harbor, T. H.

• **E-4 EXAMS**—No E-4 examinations for advancement in rating will be held this November, nor will any be held next May.

Service-wide examinations for third class petty officers, customarily held in May and November, have been cancelled by BuPers Notice 1430, of 10 June.

In the future, all examinations for advancement in rating to pay grades E-4, E-5 and E-6 will be held in February and August of each year. Exams for pay grade E-7 will continue to be held in February.

• **OFFICER DIVERS** — Applications for deep sea diving school are now being sought from Regular and Reserve officers (male) in the unrestricted line or LDO categories excluding aviation classifications.

Volunteers selected will be assigned to the 26-week Diving Officers Course at the U. S. Naval School, Deep Sea Divers, Naval Gun Factory, Washington, D. C. This course provides training in all phases of deep sea diving, with particular emphasis on submarine rescue and salvage operations at maximum

ON BOARD or off—keep operations running smoothly. Pass this copy of ALL HANDS on to nine other Navymen.

depths. Instruction includes underwater mechanics, helium-oxygen diving and underwater work with SCUBA equipment. Successful completion of the course will normally lead to tours of duty in ASR-type ships and in the Navy's deep sea diving program.

No previous diving training is required.

To meet the qualifications for this training an applicant must be an ensign, LTJG or warrant boatswain. He must not have reached his 31st birthday before starting *initial* diving training. If he has previously qualified as salvage officer or diver second class, or he has been ordered as commanding or executive officer of a diving-type ship, he must not have reached his 40th birthday before starting training. Reserve officers must agree in their applications to remain on active duty for one year after completion of the course. Before submitting the request for diving training, the applicant must:

- Complete a physical examination to determine fitness for training in diving and submit a medical officer's certificate of his physical fitness along with his application.
- Be interviewed by a qualified diving officer as to aptitude and motivation for diving duty.
- Complete the recompression chamber pressure test, including the oxygen tolerance test.
- Perform an indoctrination dive in a diving suit under the supervision of a qualified diving officer.

The commanding officer's endorsement on each applicant's request for diving instruction shall include a written statement to indicate that procedures for selection, as outlined in the latest BuPers Inst. of the 1500.15 series have been followed. The wording to be used in the statement is contained in paragraph 3c(1) of that instruction.

The 26-week Diving Officers Course is not to be confused with the 10-week one, which is designed primarily for prospective commanding officers of submarine rescue vessels. Applications for this course are not desired, since officers of appropriate rank who are prospective COs or execs of ASR-type ships will be ordered to this course by the Chief of Naval Personnel as needed.

Officers interested in the 26-week course can find further information in BuPers Inst. 1520.4D and the references listed therein.

• **MORE BAGGAGE ALLOWED** — The normal MATS 65-pound baggage allowance for naval personnel traveling on permanent change of station orders has been changed.

When it is necessary to carry more than the normal baggage allowance in order to have the required uniforms when reporting to a new duty station, an *excess baggage allowance* of 55 pounds for officers and 35 pounds for enlisted personnel may be authorized.

If, in the opinion of the order-writing activity, an additional baggage allowance is necessary, it may be granted—just so the total baggage allowance of 165 pounds is not exceeded.

Each dependent may be allowed 100 pounds of baggage, regardless of age.

• **USAFI ENROLLMENT FEE**—Since 1 Jul 1958, the initial enrollment fee for correspondence courses from the United States Armed Forces Institute has been $5.00 instead of the customary $2.00 fee.

The increase in the enrollment fee —a one-time charge for USAFI students—was due to the increase in cost of study materials. The average supplies for a single USAFI correspondence course cost $6.75. So, you see, at $5.00 you're still getting quite a bargain.

And to top that, by paying just the initial $5.00 enrollment fee, you could conceivably take as many as 150 USAFI correspondence courses without added cost. The only hitch is, you must successfully complete the course in which you are enrolled before you can apply for another one.

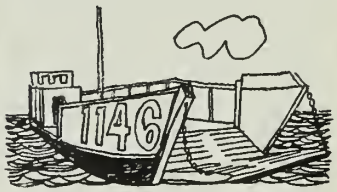
In addition to the increase in enrollment fees, other changes in USAFI enrollment policies and procedures were effected on 1 July. As a result, self-teach-courses have been discontinued and are being converted to correspondence courses; and group study participants using USAFI course materials will continue to enroll with USAFI, but without fee.

Enrollment in group study courses will be made on DD Form 305, submitted for each student under a letter of transmittal to the nearest USAFI branch.

Further detailed information concerning USAFI courses can be found in *The USAFI Catalog*, NavPers 15857C; the 1958 spring issue of *The I & E Newsletter*.

HERE'S YOUR NAVY

Newcomers to the Amphibious Force as well as many old-timers in the Gator Navy rarely pass the piers at the Naval Amphibious Base at Little Creek, Va., without giving a second look at the many rows of small gray craft tied up there. They are LCUs—the Jacks-of-all-trades of the Amphibious Force.



One of the smallest yet most useful units of the entire Amphibious Force, the 240-ton LCUs play a vital part in modern amphibious landings. Fundamentally, they are self-propelled barges.

Built somewhat like a rectangular steel box with a flat bottom, they have a ramp and forecastle compartments attached forward. Aft are the quarters, head and galley for her seven-man crew. Mounted on the 01 level is the pilot house, anchor winch and two 20mm guns.

The engineroom is below decks at the stern. Here is housed the propulsion unit; three 225-horsepower diesel engines, and two diesel-driven generators which furnish electric power.

There is plenty of room in the living compartments to berth 15 men. These small craft have a compact galley containing two sinks, a large oven and an open grill. But, best of all, is the refrigerator which is available to all, 24 hours a day.

Skippers of the LCUs are CPOs. Their cabins are furnished with a desk safe, two bunks and two large lockers.

The men serving in these craft say that it's the best duty in the Gator Navy.—W. L. Cremieux, SN, USN.

THE BULLETIN BOARD

Have You Checked the Big Opportunity in NEASP and NESEP?

IF YOU'RE UNDECIDED about the future—that is, you don't know whether to leave the Navy to go to college or stay in and make the Navy your career—your problems may be solved. Under the Navy Enlisted Advanced School Program (NEASP) and the Navy Enlisted Scientific Education Program (NESEP) you can go to college while in the Navy and still enjoy a naval career.

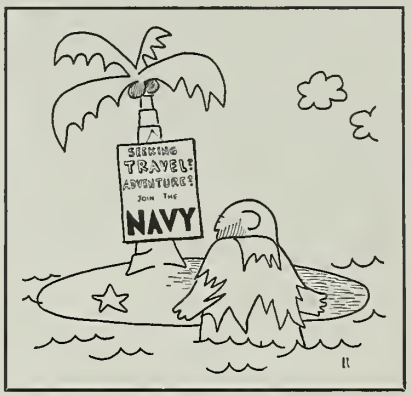
• ***The Navy Enlisted Advanced School Program*** offers selected petty officers an education leading to a baccalaureate degree at civilian institutions of higher learning. This schooling is conducted in two phases of two years each with a two-year assignment to duty in an appropriate billet between each phase. The total college training will not exceed four calendar years including summer sessions. Here's a quick rundown on this program:

NEASP is designed to prepare highly qualified petty officers for assignment to duty as systems engineers for advanced fire control systems, advanced armament (including nuclear weapons), digital computers and nuclear propulsion.

Personnel selected for this program will be ordered to the Naval Prep School at NTC Bainbridge, or to the Service School Command, NTC San Diego, for approximately nine weeks of temporary duty under instruction before entering the fall semester of college. During this preparatory college training, selectees will receive preliminary instructions in mathematics, physics, English usage, and orientation in the Navy Enlisted Advanced School Program.

After completing prep school, candidates will be ordered to the designated college or university to begin classes in the fall term. The first phase of this training consists of two full years of college work. Summer periods will be devoted to attendance at regular summer school sessions and special naval assignments. Normal leave will be granted during the Christmas holidays and other academic holidays.

All-Navy Cartoon Contest
Robert Carola, JO3, USNR



Following the initial two years' schooling, trainees will be assigned to two years' duty at sea in ships or units with advanced integrated systems in line with their training and special qualifications. Then, provided still qualified and a volunteer, they will be eligible to request the second phase of the college training. If considered qualified, they will be ordered ashore for advanced phase of training at appropriate college or university. This final phase of training is for two full years, including classroom studies and time devoted to summer cruises or other field duties.

These courses lead to a baccalaureate degree in electrical engineering. When graduated from college, trainees will be assigned to duties for which they are qualified.

While attending college under NEASP, trainees will be eligible for advancement under a special career pattern. Upon enrollment in the college or university, qualified personnel in pay grade E-4 will be advanced to E-5. Then at the end of the first year in the program or after one year of service in pay grade E-5, whichever occurs first, trainees will be advanced to pay grade E-6.

When they satisfactorily complete the first phase of the program (two years of schooling) they are advanced to CPO (E-7) or after completion of three years' service in pay grade E-6, whichever occurs first.

When entering the NEASP program all personnel will be converted to the FT(SY) rating, in equal pay grade. If they are dropped from the program, they will convert to their former rating or any appropriate rating for which they can qualify and as warranted by the needs of the service.

Personnel in the Enlisted Advanced School Program are encouraged to apply for Warrant (W1), LDO and Integration Programs when eligible. Completion of the program to the baccalaureate level will qualify students—if otherwise eligible—for a commission. Warrant and commissioned officer selectees will be appointed in regular order and continued in the program, including eligibility for selection for the second phase of NEASP—the third and fourth years of college.

If selected for officer or warrant status during the first two-year training period, students will continue on at the school in which enrolled to the baccalaureate degree level without the interposition of a two-year Fleet Training period.

• ***The Navy Enlisted Science Education Program*** places emphasis on the broader aspects of science, mathematics and engineering education. Enlisted men and women with outstanding qualifications will be provided a four-year college education leading to a baccalaureate degree in specified areas.

Like the NEASP, personnel selected to NESEP will be ordered to the Naval Prep School at Bainbridge, or to the Service School Command at San Diego, for nine weeks of summer training before entering the fall term of a designated college or university. While at college under the Science Education Program, trainees will attend regular summer sessions or receive naval training, including officer candidate indoctrination. Normal leave will be granted during the Christmas holidays and other holidays in the academic year. The four years at college will count as a normal tour of shore duty.

NESEP trainees will maintain

their enlisted status while enrolled in this program and will be eligible for advancement in accordance with the normal procedures applicable to other enlisted personnel including service-wide examinations. Completion of the course of instruction to the baccalaureate level will qualify eligible personnel — if otherwise eligible — for a commission.

Qualifications—To be eligible for either of the above outlined programs, you must be enlisted in the Regular Navy or Naval Reserve (including TAR) on active duty, and not have reached the age of 30 by 1 July of the year selected.

For NEASP you must be a male third class petty officer or above at the time of application, while NESEP is open to both male and female personnel in pay grade E-2 or above. NEASP applicants must have completed three years' active naval service by 1 July of the year selected, while the only duty requirement for those applying for the Enlisted Science Education Program is the completion of recruit training or its equivalent at the time of application. Personnel applying for either program must be high school graduates or possess high school level GED test score qualifications in accordance with *BuPers Manual*, article D2103, paragraph 14a., and have a combined GCT and ARI score of at least 118.

Candidates for the Enlisted Advanced School Program must have four years' obligated service as of 1 July of the year selected, and a minimum of four years' obligated service as of 1 July of the year selected for the second phase of the program. NESEP candidates are required to have six years' obligated service as of 1 July of the year selected and upon completion of the second year of college must execute an agreement to extend their enlistment for two additional years.

All personnel applying for either program must be citizens of the U.S.; be recommended by their CO; have a clear record for the past two years, and have a final Secret security clearance before entering college. Applicants may be married or single as there are no restrictions on marital status.

In addition, applicants must meet the required physical standards.

If you meet the above listed eligibility requirements, you better get hot and submit your application now. You have only until 15 Oct 1958 to apply for schooling which begins in the 1959 Fall term.

A single application requesting consideration for both programs may be submitted if you desire dual consideration. Applications must be submitted on the Enlisted Evaluation Report, NavPers 1339 (Rev 3-56). Be sure to provide all the information requested on both the front and the back of the form.

Applications must have a completed BuMed Standard Form 88 and 89 and all transcripts supporting the educational background of the individual. High school transcripts are required for consideration before the selection board.

Applications will be reviewed by the Chief of Naval Personnel and a screening examination will be forwarded. This examination will be given on the first Monday in December.

Final selection for both programs will be made during March of the year of college entrance. Selection will be determined on the individual's service record, prior educational endeavor, commanding officer's recommendations and screening examination scores. Selected candidates for both programs will be issued orders in time to report to the prep schools by class convening date.

Complete detailed instructions govering the Navy Enlisted Advanced School Program and the Navy Enlisted Scientific Education Program can be found in BuPers Inst. 1510.69C of 21 May 1958.

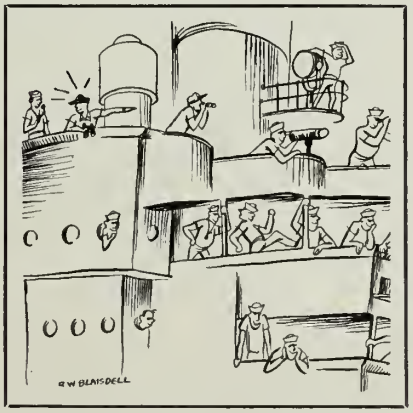
Navyman's New Shoes Win in a Walk

Chances are that one of the reasons you joined the Navy was to see the world. And, as you must have realized by now, one of the modes of travel involves the usage of shoe leather.

To help you get 50 per cent more mileage from your liberty shoes, the Navy has adopted a tanned leather butyl-rubber impregnated sole. This sole has withstood the toughest tests to outlast ordinary military dress shoes by a wide margin.

It was wear-tested for three years by the Research and Development Division of the Navy Clothing and Textile Office, Brooklyn, N.Y., and at the Anacostia Naval Air Station in Washington, D. C.

All-Navy Cartoon Contest
Richard W. Blaisdell, Ens, USNR



"Ask Combat for her range, bearing and telephone number!"

Four More Correspondence Courses Ready for EMs

Four new Enlisted Correspondence Courses are now available. The new courses are:

Course	NavPers No.
Basic Electronics	91227
*Lithographer 3, Vol 1	91472-1
Aviation Fire Control Technician 3	91633
Metalsmith 2	91534-1

*May be retaken for repeat Naval Reserve credit.

Two have been discontinued.

Course	NavPers No.
Printer 3	91477-1
Printer 2	91478-1A

Enlisted Correspondence Courses will be administered (with certain exceptions) by your local command instead of by the Correspondence Course Center.

If you are on active duty, your division officer will advise you whether the course for which you have applied is suitable to your rate and to the training program you are following. If it is, he will see that your application (NavPers 231) is forwarded to the Correspondence Course Center, which will supply the course materials to your command for administration.

Those on inactive duty will have courses administered by the Center.

Here's Rundown on Dislocation Allowances for Navy Families

IN AN EFFORT to clear up a number of misunderstandings pertaining to the payment of Dislocation Allowances, here's a complete rundown of just what's what:

What Is A Dislocation Allowance?

A dislocation allowance is a payment made to individuals in an effort to lighten the financial burden involved in moving their dependents and household goods upon a permanent change of station. This allowance is in addition to all other allowances authorized except for those persons who elect to receive a trailer allowance.

The dislocation allowance, payable since 1 Apr 1955, was authorized by Public Law 20 of the 84th Congress.

What Is The Amount Payable?

The amount payable as a dislocation allowance is equal to your monthly basic allowance for quarters (BAQ) that you were receiving on the effective date of your permanent change of station orders. This allowance will not be prorated nor paid more than once in connection with a single change of station.

When Is A Dislocation Allowance Payable?

In general, you will receive a dislocation allowance when your dependents have completed travel and relocated their household in connection with a permanent change of station if dependents' transportation or travel allowance is authorized. Actual transportation of dependents at government expense is not a prerequisite to entitlement to the dislocation allowance.

You are entitled to a dislocation allowance when your dependents have completed authorized travel to a designated place in the event you are transferred or assigned to a restricted area, or when your dependents are not authorized concurrent travel. The dislocation allowance will be payable to you upon completion of your dependents' travel to the designated place. When such payment is made, you are not entitled to any further dislocation allowance until you receive another permanent transfer. If your dependents do not move to your new duty station before you receive further permanent change of station orders to a new station and your dependents

"I suppose you're all wondering just why I called you here. . . ."

are authorized to move and do move in connection with your latter permanent change of station, you are eligible to receive payment of the dislocation allowance.

In the event you are stationed overseas and are transferred to a hospital in the U. S. for treatment, and your dependents return to the U. S. and relocate their household incident to such treatment, you are eligible to receive payment of the dislocation allowance. If you are stationed in the U. S., however, and transferred to a hospital for treatment, you are not entitled to a dislocation allowance.

• It should be noted, however, that Public Law 20 places certain restrictions on the payment of the dislocation allowance. In this respect, you're entitled to receive only one dislocation allowance during any fiscal year, unless the Secretary of the Navy considers that the needs of the service require you to make more than one permanent change of station during the fiscal year. (More on this later.)

Even with a permanent change of station, a dislocation allowance is NOT always payable. Here's a list of the cases under which you will not receive a dislocation allowance:

• If you are an enlisted man in pay grades E-1, E-2, E-3, or E-4 with four years' service or less.

• If you are a cadet or midshipman.

• If you are attending a school or assigned to an installation as a student, if the course of instruction is less than 20 weeks' duration.

• If you are called to active duty for training for a period of less than one year.

• If you are called to active duty for other than training duty for less than six months.

• If you failed to receive revocation of permanent change of station orders because you took advantage of a leave of absence and the notice of revocation was received at your old permanent station sufficiently in advance of the time you would have been required to proceed under the original orders.

• When your dependent is a member of the armed forces and on active duty at the effective date of your orders.

• If your dependents departed from your old permanent station before you received your orders, and the voucher claim for dependent travel is not supported by a certificate by the commanding officer or his designated representative of the headquarters issuing the orders that you were advised before the issuance of change of station orders that such orders would be issued.

• Where dependency does not exist on the effective date of the order directing permanent change of station.

• For any travel performed by a dependent parent or parents who do not actually reside in your household unless otherwise authorized by the Secretary of the Navy or his designated representative.

• For any travel of dependents to a place where they do not intend to establish a residence.

• For travel from home or from place from which ordered to active duty to first permanent duty station upon appointment, call to active duty, enlistment, reenlistment or induction.

• When travel is from last duty station to home or to the place from which ordered to active duty upon separation from the service, release from active duty, placement on the temporary disability retired list, or retirement.

• When travel is from last duty station in one period of service to first duty station in another period of service where there was no ordered permanent change of station between those stations.

• For travel of dependents from

other than old permanent station to other than new station unless the payment of travel allowances or the furnishing of transportation for dependents is authorized by the Secretary of the Navy or his designated representative.

• For travel in connection with any permanent change of station between stations located within the corporate limits of the same city.

• For travel in connection with a permanent change of station from one station to another located in close proximity thereto other than within the corporate limits of the same city, unless supported by a certificate of the commanding officer of the new permanent station that the relocation of the household was necessary as a direct result of the permanent change of station.

• When you elect to receive the "trailer allowance" described in Chapter 10, *Joint Travel Regulations.*

• For more than one permanent change of station during any fiscal year, except on the findings of the Secretary of the Navy that the exigencies of the service require more than one such change of station during the fiscal year. This limitation does not apply to personnel ordered to or from service schools as a permanent change of station, and such moves shall not be considered when determining whether or not a proposed move requires a finding. Civilian colleges at which NROTC or other Navy-sponsored educational units are located are not service schools. Permanent change of station orders with schooling (less than 20 weeks) en route do require SecNav-Finds, when applicable.

For the purpose of determining the fiscal year in which entitlement to a dislocation allowance occurs, the governing date will be the date of your detachment from the old permanent duty station (on permanent change of station orders). Although an earlier permanent change of station occurred during the same fiscal year, it shall be excluded from computation if no dislocation allowance was authorized. Examples: A permanent change of station before promotion to an eligible pay grade or completion of over four years' service in grade E-4; before acquiring dependents; or change of station on orders from or between courses of instruction.

If you are involved in more than one permanent change of station during a fiscal year where entitlement to dislocation allowance is involved, your orders will require a finding from the Secretary of the Navy that the second or subsequent change of station is required for the needs of the Navy.

It should be noted that a request for a SecNav Finding must be initiated where entitlement for a second or subsequent dislocation allowance may become involved. Entitlement to a dislocation allowance is established when your dependents are authorized to move and the move is completed in connection with your permanent change of station. If no previous entitlement has been estab-

WAY BACK WHEN

USS Enterprise vs HMS Boxer

On 1 Sep 1813 the 265-ton United States brig *Enterprise*, carrying a crew of 102 and skippered by CAPT William Burrows, left Portsmouth, N. H., on a cruise to the southward. Four days later she spied a British brig and was challenged by a gun shot.

Enterprise hauled up on the wind and stood out to sea, preparing for action. But the wind died away and the two enemies drifted about in a dead calm. Six hours later, the wind came up. CAPT Burrows shortened sail, squared his yards, and bore down before the wind. An ensign was hoisted at each of the mastheads and another at the peak. A gun answered the previous challenge of the morning.

No more were fired until the ships closed to within half pistol-shot. Then the 300-ton British ship *Boxer* came up into the wind. The crew of about a hundred gave three cheers. This was followed by a starboard broadside.

The cheers were returned. And so was the broadside.

But the advantage of training was on the side of *Enterprise*.

Shortly after the action started, CAPT Burrows was struck by a musket ball and fell, wounded. Although he maintained command, most of the responsibility fell to a LT McCall. At almost the same time CAPT Burrows was wounded, the British captain was killed by a cannon shot on the quarterdeck of *Boxer*.

During the first eight minutes *Enterprise*'s 14 eighteen-pound carronades and two long nines proved effective. The maintopmast and topsail yard of the Englishman were soon shot away, and a position gained where a raking fire was kept up for some twelve minutes. The entire battle lasted half an hour.

Someone noticed that the English brig's guns weren't firing. But her colors were still flying at the masthead. The order to cease fire was given aboard the American brig. Through the smoke, someone aboard *Boxer* called, "Cease firing there! We have surrendered."

LT McCall cried out, "Why don't you haul down your colors?" The reply came back. "We can't, sir. They are nailed to the mast."

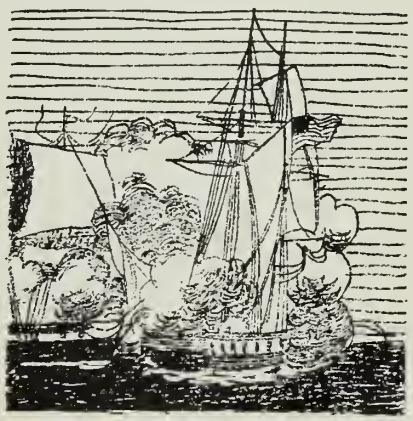
A boat was lowered from *Enterprise*, rowed to the surrendered ship and returned with the British captain's sword. This was presented to CAPT Burrows before he died.

When *Enterprise* brought her prize into Portland, Maine, the bodies of the two dead captains were brought on shore in 10-oared barges rowed at minute strokes by masters of ships, and accompanied by a procession of almost all the barges and boats in the harbor. The ships fired minute-guns. All officers of *Enterprise* and *Boxer* acted as joint mourners.

A strange part of this battle was that CAPT Burrows had never been in a battle before. And LT McCall, who had most of the responsibility of command, had never before heard the sound of a hostile shot.

It wouldn't be fair to end this without explaining that HMS *Boxer*, captured by USS *Enterprise*, isn't considered to be the first ship of that name in our Navy. The first USS *Boxer* was a brig of 370 tons built in 1815. In bringing the ship's name up-to-date, the second was a schooner built in 1831 and later rerigged as a brig. The third was the English-built *Tristam Shandy;* an iron side-wheel steamer captured while running the blockade during the Civil War and re-named *Boxer*.

The fourth *Boxer* was a wooden brigantine built in 1905. The fifth is the present USS *Boxer* (CV 21).



lished in the same fiscal year, a request for a SecNav Finding is not required.

When permanent changes of station of units, groups, or categories of personnel are to be made, and individual Findings by SecNav would be impracticable and could not serve to reduce the frequency of moves, requests for a SecNav Finding may be initiated by groups rather than individuals. Examples of such cases are: 1) In changes of home ports of units where orders to officers and enlisted transfer directives are not required; and, 2) In the ship inactivation program where orders to officers and enlisted transfer directives are required.

Whenever necessity for a SecNav Finding can be foreseen prior to the issuance of orders, issuing authorities (CINCPACFLT, CINCLANTFLT, COMAIRLANT, COMAIRPAC, CNATRA, CNAVANTRA, CNABATRA, commandants of naval districts and river commands, and delegated subordinate commanders) will request a SecNav Finding from the Chief of Naval Personnel.

If you receive permanent transfer orders requiring, but not indicating a SecNav Finding, your command should immediately refer to the issuing authority who will explore alternate solutions. If the necessity still exists, your command will request a SecNav Finding from the Chief of Naval Personnel.

The Chief of Naval Personnel will request a Finding from the Secretary of the Navy and notify interested commands of the results.

Under no circumstances will officers' orders or enlisted transfer directives requiring a SecNav Finding be executed before the receipt of such Finding unless specifically approved in advance by the Chief of Naval Personnel. When urgent circumstances require, approval of such execution may be requested by message indicating particulars of the urgency.

When authorized by the Chief of Naval Personnel, the phrase, "The Secretary of the Navy has found that this permanent change of station is required by the exigencies of the service," shall be indicated on individual orders or endorsements thereto; and on certificates of change of home ports or home yards furnished to individuals involved. This phrase may be abbreviated as "SECNAVFIND." In addition, the authority granting the authorization shall also be referenced on all orders, endorsements and certificates.

If you have dependents and receive orders for a permanent change of station that do not require a SecNav Finding, then your commanding officer or his representative should so indicate on your Standard Transfer Orders by the certification: "SECNAVFIND NOT REQUIRED."

Here's a brief step-by-step procedure, as outlined in paragraph seven of BuPers Inst. 4651.1, on how to request a SecNav Finding:

For Individuals—Commanding officers, in referring officers' orders or enlisted transfer directives to issuing

WHAT'S IN A NAME

Red Rippers

In business for more than 31 years and still going strong—that's the Red Rippers, a fighter squadron with a combat record to match its fighting name.

Officially known as VF-11, the Red Rippers were first commissioned on 1 Feb 1927 at Hampton Roads, Va., as Fighting Squadron Five. Their first aircraft were open-cockpit F6C-3 *Hawk* biplanes, but the next year they were flying the "more modern" open-cockpit F4B-1s, which had a top speed of about 190 miles an hour. About the same time, three of the Rippers formed a flight demonstration team which toured the country giving exhibitions of precision flying.

In 1931 the squadron represented the Navy at the National Air Races in Chicago, Ill., and two years later another important event in its history took place with the receipt of the Navy's first FF-1s. In 1934 the Rippers were also assigned five F-11Cs, for a while called BFG-2s or Bomber Fighters. The next important date was 1936, when the squadron began receiving F2Fs and was transferred from the air group of USS *Lexington* (CV 2) to that of the old USS *Ranger* (CV 4).

Early World War II found the Rippers, by then redesignated VF-41, deployed on *Ranger* and flying F4F *Wildcats*. They took part in the North African Campaign in November 1942, accounting for 16 enemy aircraft. October of the following year saw them participating in strikes against German forces at Budo, Atler Fjord and Kunna Head, Norway. They operated with the British Home Fleet near Norway, guarding convoy routes to Russia.

Detached from *Ranger* in 1944, the squadron (now VF-4) received F6F *Hellcats* and moved to the Pacific Theater. There it participated in numerous strikes on the Philippines from USS *Bunker Hill* (CV 17) before it boarded USS *Essex* (CV 9) that December to become part of Task Force 38 (later 58). Before long it had seen action over Luzon, Formosa and Okinawa. Then, on 16 Feb 1945, it was among the first fighter squadrons to strike Tokyo. For their World War II action the Rippers received two Presidential Unit Citations.

On 27 Oct 1945, after the Rippers had switched to F4U-4 Corsairs, they flew with other air units over New England, then over New York Harbor, where they were reviewed by President Truman. In 1946 the squadron became VF-1A, and in 1947 another plane came along—the F8F *Bearcat*.

On 2 Aug 1948 the squadron designation was changed to its present one, and the following month VF-11 boarded USS *Tarawa* (CV 40) for a round-the-world cruise, which was completed in early '49. In 1950 the Rippers got their first jet, the F2H-1 *Banshee*.

The Rippers didn't get in on the early part of the Korean fighting, but they did see plenty of combat in that conflict during late 1952 and early 1953, by which time they were flying a later model of the *Banshee* off USS *Kearsarge* (CV 33).

Today, they're flying a still later model of the same plane, and they're still living up to their high standards of the early Rippers. For instance, in 1956, during COMFAIR JAX's annual high-angle-loft and over-the-shoulder bombing exercises, each VF-11 pilot taking part brought home an E. It was the first, or at least one of the very, very few times in Atlantic Fleet history that 100 per cent of the participating pilots won an E in the same exercise.

authorities, and the latter commands when requesting SecNav Findings from the Chief of Naval Personnel, shall include the following information in each case:

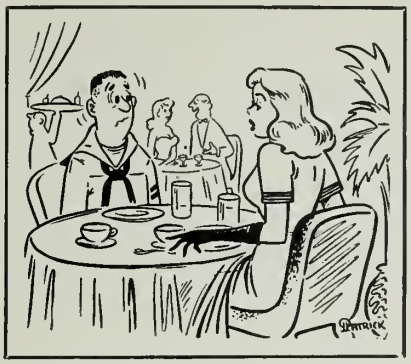
- Name, grade or rate, and file or service number.
- Date of detachment from each previous permanent duty station in same fiscal year where entitlement to dislocation allowance was involved except those to or from service schools.
- Present duty station or status.
- Latest date of incident detachment.
- New duty assignment or status.
- Necessity for proposed transfer and basic reason that particular individual is selected for such transfer (for use of issuing commands).
- Other pertinent information, if any. If an earlier entitlement to a dislocation allowance was the result of a change of home port or ship inactivation, the request should so state.

Incident to Change of Home Ports —Commanding officers of units involved should request a SecNav Finding from the Chief of Naval Personnel for officers and enlisted personnel on board on effective date of change, who, as a result of such change, are entitled to a second dislocation allowance during the current fiscal year. The following information will be included in the request for finding:

For Enlisted Personnel—the approximate number of total enlisted personnel on board on effective date of change of home port; the approximate number of those entitled to move of dependents incident to the change of home port; and the approximate number requiring a SecNav Finding.

For Officer Personnel—the full name, grade, and file number of each officer concerned.

Incident to Permanent Changes of Station as a Result of Ship/Activity Inactivation Program—The issuing authority directing the transfer of enlisted personnel will request a SecNav Finding from the Chief of Naval Personnel for personnel requiring a SecNav Finding and will include the following information for each ship/activity for each reduction period. (This information will be furnished with availability reports.)

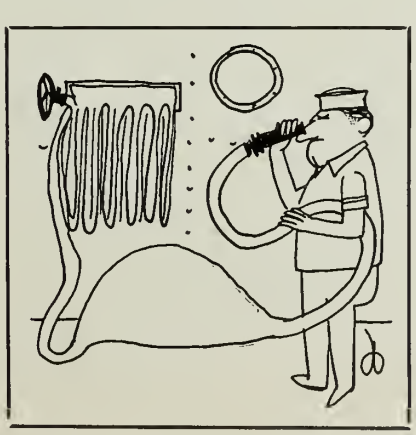


"I just remembered . . . it's the prices that are fabulous here, not the food!"

The approximate number of enlisted personnel being detached; the approximate number of those enlisted personnel entitled to move dependents incident to detachment; and the approximate number of them requiring a SecNav Finding.

All requests for SecNav Findings should be submitted at the earliest practicable date. Requests need not be submitted for the entire period of inactivation before the ship commences phase Alfa, but may be submitted in increments by commands concerned.

The Chief of Naval Personnel will include the SecNav Finding in orders to officers being detached from ships being decommissioned and activities being disestablished, when it is evident from records available that such a Finding is required. In the event a Finding is required and not included in an officer's orders, the command concerned shall request a Finding from the Chief of Naval Personnel. Such requests should include the officer's full name, grade, file number, date, as well as the serial number of the orders.



Two More Correspondence Courses Join the List

Two new Enlisted Correspondence Courses are now available. Two courses have been discontinued.

Enlisted Correspondence Courses for active duty personnel will be administered (with certain exceptions) by your local command instead of by the Correspondence Course Center. Your division officer will advise you whether the course for which you have applied is suitable to your rate and to the training program you are following. If it is, he will see that your application (NavPers 231) is forwarded to the Correspondence Course Center, which will supply the course materials to your command for administration.

Personnel on inactive duty will have courses administered by the Center.

The new courses are:

New Courses	*NavPers No.*
*Boilerman 1 & C	91514-2
*Gunner's Mate 2	91355-1

*May be retaken for repeat Naval Reserve credit.

Discontinued Courses	*NavPers No.*
Gunner's Mate 2, Vol 1	91311
Gunner's Mate 2, Vol 2	91312

For other new correspondence courses, see page 49. Changes in the training program are covered in ALL HANDS as they occur.

Professional Seminars Are Set For Active Duty Chaplains

There will be a series of seminars to be held in the Fifth and Eleventh Naval Districts for active duty chaplains. The District Chaplains will coordinate the seminars in their districts.

Protestant seminars will be held at Fifth Naval District Headquarters 2-5 and 8-12 September. The Eleventh Naval District Headquarters sponsored the Protestant seminars which were held 14-18 and 21-25 July.

The subject of Ethics was chosen to provide the chaplain with fresh insight into both individual and social ethical problems.

Catholic seminars will be held at Eleventh Naval District Headquarters 18-22 and 25-30 August, and at Fifth Naval District Headquarters 15-19 and 22-16 Sept. Subject will be Moral Theology and Canon Law.

This Will Bring You Up to Date on Living Conditions in Japan

IF YOU'RE GOING to Japan for duty you'll be interested in what to expect when you get there and what you must do to get permission to take your family with you.

Under certain conditions, most naval personnel may take their dependents to Japan with them. Before considering or applying for concurrent travel, however, you should realize that living conditions may not be what you are used to, that private rentals are expensive, and utilities — particularly electricity — are extremely high.

The average house in Japan is of loose construction and is not insulated or weatherized like most Stateside houses. Therefore, in the winter months, you'll find that heating is quite a problem and expensive as well. And when it comes to preparing meals, your wife can expect new adventures too. Cooking by kerosene or butane is a far cry from what the average Navy wife is used to.

In view of these conditions, it is strongly recommended that you report to Japan — especially in the winter months—alone and personally take a look at the local conditions before you have your family join you.

For those heeding this advice, the following information applies: (Remember, if your dependents do not accompany you, it will be from two to 14 months after your arrival before they will be able to join you.)

After arriving in Japan you can apply for *non-priority* private rentals or for *priority* government quarters.

• ***Non-Priority Private Rentals*** are approved private civilian rentals that have been inspected and approved by the cognizant area housing commander in regard to the minimum standards of construction, safety and health. These units are scarce, substandard in size and construction, and expensive in regard to rental fees and utility costs.

If you decide to rent a unit which does not meet the minimum acceptable standards for approval, it is customary for you, as tenant, to bear the cost of any repairs or improvements necessary.

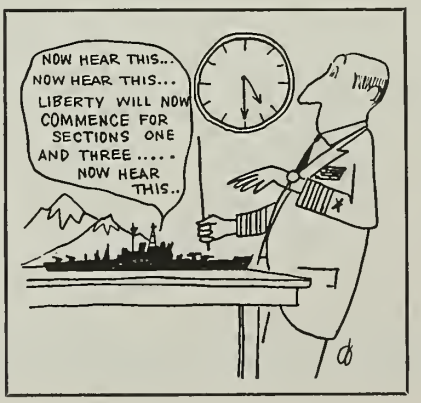
Rents, which range from $60 to $150 per month, do not include utilities. These average about $20 per month during mild weather and increase substantially during the winter months. Electricity is extremely expensive and most cooking and heating is done through the use of kerosene or butane. Because of generally loose house construction, many families find it necessary to use more than one space heater to provide adequate warmth during the winter months. Space heating units of all kinds must be secured at night because of danger of fires and asphyxiation.

Private rentals are seldom furnished with any type furniture. Refrigerators, space heaters, easy chairs, beds, dining tables, and chairs can usually be obtained from government issue for use in private rentals. (No washing machines, cook stoves, draperies and rugs are available from government issue.)

If you decide to take a non-priority private rental, you then go ahead and apply for your family's transportation. They should be scheduled for travel within six weeks after you apply and arrive in Japan about two weeks later. It takes anywhere from two to three months from the time you submit your application for transportation to the day they join you.

• ***Priority Rentals*** are the standard public dependent quarters maintained by the government. A waiting period of from seven to 14 months exists for enlisted personnel and officers of the grade of commander and below. These quarters are assigned on a priority system based on the date of your departure from CONUS.

The Navy has a limited allocation of public dependent quarters near all stations. The approximate waiting period in the Tokyo area is 11 months; Yokohama—seven months; Yokosuka — 11 months; Iwakuni — nine months; and Sasebo — 14 months.



These quarters are considered to be adequate and somewhat similar to U.S. standards. They are assigned on a bedroom-requirement basis. In certain areas, some quarters include furniture and utilities, while others are unfurnished except for refrigerators and stoves.

If you decide to wait for government (priority) housing and let your family travel on a priority basis, you will be given quarters upon their arrival. This procedure is the most economical but it takes anywhere from seven to 14 months after your arrival in Japan before your family will be able to join you.

No doubt you won't want to wait that long, so you'll bear the expense and inconveniences and have your family travel to Japan with you. This is possible if you are ordered to a shore-based activity in Japan, a Fleet air unit based ashore permanently in Japan, or to a ship or unit homeported in Japan.

Concurrent Travel—To be eligible for concurrent travel you must fall into one of the following eligibility requirements:

• Officers of flag rank who will occupy government dependent quarters upon arrival.

• Officers of the grade of captain who will immediately enter government quarters upon arrival.

• Officers of the grade of commander and below who have been authorized to enter approved private rental housing.

• Enlisted personnel in pay grades E-5 and above, and those in E-4 with over four years' service, who have been authorized to enter approved private rentals.

Enlisted personnel in pay grade E-4 with less than four years' service and those in lower pay grades are not eligible for transportation of dependents. Therefore, they *cannot* bring their dependents with them.

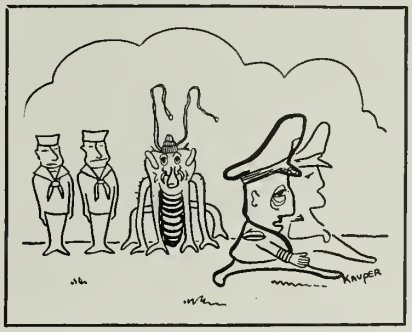
Regardless of your pay grade, you cannot take your family to Japan, or for that matter to any overseas area, if your obligated service is less

than the prescribed tour of duty unless you voluntarily extend your enlistment to permit completion of the prescribed tour. In addition, dependents will not be transported overseas unless there is a minimum of 12 months remaining on the applicable overseas tour of duty after dependents arrive.

If you meet the eligibility requirements outlined above, you may submit a request—see enclosure (3) to BuPers Inst. 4650.6C of 5 May 1958 for a suggested format for message requesting concurrent travel—to the appropriate commander as indicated below, with information copies of the message to ComNavForJapan, Com 12 and your new duty station if the latter is not the action addressee.

- If you are ordered to an activity in the *Sasebo* area, your request for concurrent travel will be addressed to and processed by the Commander, Fleet Activities, Sasebo.
- The Commanding Officer, Marine Corps Air Facility Iwakuni, will process your request if you are ordered to the *Iwakuni* area.
- The Commanding Officer, Naval Air Station, Atsugi, will process applications for personnel ordered to:
  - ComFAirWestPac
  - ComFAirJapan
  - ComNABJapan
  - NAS Atsugi
  - FleTacSupRon 21 Det
  - FASRon Eleven
  - Utility Squadron Five (VU-5)
  - Mobile Intell Prod Unit Pac
- Commanding Officer, Naval Communications Facility, Yokosuka, will process applications for being assigned to:
  - NavCommFac Yokosuka
  - NavSecGru Kamiseya
  - NavSecGru Activity, Sakata
  - FPO Yokohama (naval personnel)
  - NavRadFac Kamiseya
  - NavRadFac Totsuka
  - NavSecGru Acty, Shiroi Air Base
- Commanding Officer, Headquarters Support Activity, Yokosuka, will process applications for personnel ordered to any command physically located at Fleet Activities, Yokosuka, including:
  - ComNavForJapan Staff
  - Combat Camera Gru FE
  - ServCraft Unit Two
  - FleWeaFac Yokosuka
  - METU 7
  - Naval Ordnance Facility
  - Naval Hospital

All-Navy Cartoon Contest
John G. Kauper, CN



"New Navy or not, Grimsley, I still maintain there was something odd about that last man!"

  - Naval Dental Clinic
  - CoMSTSWestPacArea Staff
  - OICConstFarEast
  - FleTraGruWestPac
  - Navy Area Audit Office
  - SecGruDet ComNavForJapan
  - ComFleAct Yokosuka Staff
  - Branch Hydro Office
  - Ship Repair Facility
  - Navy Supply Depot
  - Headquarters Support Acty
  - ComSubGruWestPac
  - RPMIO 3
  - MoSupGru Charlie (CTG 73.5)
  - Harbor Defense Unit

Units home-ported at Yokosuka, including:
- ComSeventhFlt Staff
- USS *Jupiter* (AVS 8)
- USS *Mahopac* (ATA 196)
- USS *Pollux* (AKS 4)
- Naval Beach Gru One WestPac Det
- Amphib Constr Battalion One WestPac Det
- ComDesFlot One Staff
- USS *Castor* (AKS 1)
- USS *Etlah* (AN 79)
- KD Unit Twenty-five
- Beachmaster Unit One WestPac Det

Commands Physically located at NAF Oppama, including:
- NAF Oppama
- HU One (Det One)

Commands and activities physically located in Yokohama except for naval personnel attached to FPO Yokohama:
- MSTSO Yokohama
- NCSO Yokohama

Commands and activities located in Tokyo:
- Navy Pers 1503rd ATW
- NATCO, TIA (Haneda)
- Ch Nat'l Security Agency Pacific

For personnel being assigned to *Fuchu* and to commands located in isolated sections of Japan not covered above, but where dependents are authorized:
- ComUSJapan Staff (Fuchu)
- MSTS/NCSO Rep Moji
- MSTS/NCSO Rep Kure
- MSTS/NCSO Rep Hakata

When you request concurrent travel, your new duty station will appoint an agent to help you in making hotel reservations, procuring a private rental, or in giving you assistance in any other reasonable way.

If your request for concurrent travel is approved by one of the appropriate commanders listed above, your dependents are automatically granted the required entrance approval. A flag officer is not required to submit a request for concurrent travel; however, he must request entry clearance for his dependents if they are to accompany him to his new station in Japan.

When you receive the authorization for concurrent travel and entry approval, you will be required to submit an "Application for Transportation for Dependents" (Form DD 884 which replaces BuSandA Form 33) to The District Passenger Transportation Office, Federal Office Building, San Francisco 2, Calif. Com12 will then send you an "Offer of Passage Form," which you should fill out and return immediately. At that time you should also notify your new duty station of your ETA in Japan.

Passports—Your dependents will need a passport for travel to Japan. If your children are under 12 years of age, they will be covered on a single passport issued to your wife. If they are over 12, they will be issued individual passports. In order to obtain a passport, your wife will need:

- Birth Certificate for herself and each child (Photostatic copies or notarized affidavits will be accepted).
- Immunization Record for herself and each child. (For entry into Japan you and your dependents will need cholera, thyphus, typhoid, tetanus and smallpox "shots." That's quite a number so you should begin to get your inoculations as soon as possible. Two to four weeks are required to complete the necessary shots.)
- Passport pictures—you'll need three 3 x 3 inch prints. A group shot of your wife and children under

12 years of age is acceptable.

Passports are normally issued in Washington, D.C. When applying for a passport, if not in Washington, D.C., your dependents should personally apply to a clerk of the nearest U.S. District Court, to a clerk of a state court authorized to naturalize aliens, or to a passport agency in New York, N.Y., or San Francisco, Calif. Your dependents should be accompanied by one witness who has known them for at least two years, when applying for passport.

It takes from three weeks to a month for a passport application to be processed through the State Department. It will then be forwarded to the District Passenger Transportation Office, Federal Office Building, San Francisco, for delivery to your dependents at time of sailing.

Hotels in Japan—When you arrive in Japan it may be necessary for you and your family to stay in a recommended hotel until arrangements can be made for you to obtain an approved private rental. Average room rent for hotels within reasonable commuting distances is from $6.00 to $12.00 per day. Meals range from $3 to $6 per person per day. BuPers Inst. 4650.6C, Enclosure 1 lists recommended hotels and estimated expenses by areas within two-hour commuting distances from the various naval activities in Japan.

Transportation—Commuting is a major problem in Japan even though only relatively short distances are involved. Rough, narrow roads and congested areas can make traveling tedious and time-consuming. In some areas there is no bus or train service readily available. Therefore, it is almost a "must" to take your car to Japan with you. But note that wear on private vehicles is advanced considerably because of poor roads and other conditions.

You may initiate a request for transportation of your car by making an application with the Freight Transportation Office at your port of embarkation. When leaving your car for shipment, you'll need two certified copies of your orders and a completed S&A Form 322. Your car cannot be shipped unless it is free of legal encumbrances, or unless written permission from the holder is presented authorizing removal of the vehicle from the U.S.

The Japanese government requires all privately owned vehicles to be equipped with either a mechanical or flashing-light turn indicator. Dependents should bring with them a valid current driver's license in order to qualify for a Japanese driver's permit.

Japanese road tax, license and inspection fees must be paid shortly after your car arrives in Japan. The road tax is 9000 Yen ($25) per year. License and inspection fees total 880 Yen ($2.22) per year.

The climate in Japan is similar to that of the middle belt of the U.S. The average temperature in August, the hottest month, is 82°F., and in January, the coldest month, is 35°F. Much rainfall accounts for the ample vegetation found in Japan. The rainy season occurs during the summer months and normally ends in mid-July or early August. The summer is noted for the heat and dampness when mildew is prevalent. Light snow may be expected from December to March, but not too frequently.

You may obtain further detailed information about living conditions at Iwakuni, Sasebo, Yokosuka, and Tokyo, Japan, by writing to the Chief of Naval Personnel (Attn: Pers G221) Navy Dept., Wash. 25, D.C.

Course on Legal Medicine Open to Officers and HMs

The Medical Department correspondence course, ***Legal Medicine*** (NavPers 10766), is now available to Regular and Reserve officers and enlisted personnel. This course is designed to acquaint personnel with the role that legal medicine plays in modern hospital administration including a discussion of hospital organization, liability, care of the patient, confidential communication, and contractual relationships.

The course consists of eight assignments evaluated at twenty-four points' credit for purposes of Naval Reserve retirement and promotion. Applications should be made on NavPers Form 992 (Rev 10/54 or later) with appropriate change in the "To" line, forwarded via official channels to the Commanding Officer, U.S. Naval Medical School, National Naval Medical Center, Bethesda 14, Maryland (Attn: Correspondence Training Division).

All-Navy Cartoon Contest
Donald R. Kramer, AO3, USN

"He claims he found it, sir!"

Here's Your Chance To Become One of Navy's Musicmen, Three Types of Courses Open

If you have had musical training and are experienced in playing a musical instrument, there is a good chance that you can request to be enrolled in the U.S. Naval School of Music for a course of instruction. Actually, there are three courses; basic, advanced and refresher.

The Class A basic course convenes every month and runs anywhere from 26 to 36 months. It is set up to qualify personnel as performing members of unit bands. The program is open to male enlisted personnel EXCEPT petty officers in the following ratings: QM, SM, RD, SO, TM, GS, NW, ET, OM, RM, CT, MM, MR, EM, IC, CE, BU, AT, AQ, GF, AM, PR, AG, TD or PT. You must have three years' obligated service.

If you are accepted it will lead to assignment to the U.S. Naval School of Music with a view toward later advancement within the musician rating. But this depends upon your successful completion of the music school's course.

You can submit a request for this course on the Enlisted Evaluation Report (NavPers 1339 Rev 3-56) to the Chief of Naval Personnel. It must include a completed Inservice Music Application Form (NavPers 759). These forms are available from the Officer in Charge, U.S. Naval School of Music, or the leader of any Navy Band.

Applicants will have to take a musical audition given by a Bandmaster (WO 7850), Chief Musician

(MUC), or other competent musical authority with results entered in the audition space provided on form NavPers 759. You will have to demonstrate technical proficiency on your chosen instrument, demonstrate your ability to sight-read, and produce the characteristic musical tone of the instrument throughout its range. If you play a stringed instrument, accordion or piano, you will be required to study a band instrument.

The curriculum of the basic course includes: concert band, dance band, harmony, ear training, sectional rehearsals, seaman training course, general training course, and private instrumental instruction.

The Class B advanced course is open to musicians first class with three or more years of naval service who have three years obligated service and who wish to be trained for advancement to chief musician or as a leader of a unit band. This course runs 52 weeks and convenes biannually on the first Monday in January and August.

If this course applies to you, then your request should be submitted to the Chief of Naval Personnel on the Enlisted Evaluation Report (NavPers 1339 Rev 3-56).

When you report to this course, and before being enrolled, you will be given a musical examination based on the present rating requirements for musician first class.

The curriculum includes: conducting, band administration, theory, instrumentation, arranging, drum majoring, maintenance and repair of musical equipment, piano, band and orchestra literature.

There is a third course. This is the Class C-1 Refresher Course for musicians to give remedial training to improve instrumental proficiency and give additional theoretical instruction. If you have three years' naval service and two years' obligated service, you can submit your request on the Enlisted Evaluation Report (NavPers 1339 Rev 3-56) to the Chief of Naval Personnel. The length of the course is from 12 to 24 weeks and convenes on the first Monday of each quarter.

The curriculum of the refresher course includes: harmony, ear training, concert band, dance band, sectional rehearsals, and private instrumental instruction.

HOW DID IT START

Ship Christenings

The ceremonial launching of a ship is a nautical tradition harking back some four thousand years. In earlier days human sacrifices provided the blood for dampening the ship before it touched the water. In return for a blood offering, the sea gods were supposed to spare the blood and lives of those who would man the ship.

Some time back ALL HANDS did some research on the subject and came up with the following facts. The hardy Vikings, for example, launching their galleys down an incline to the water, placed bound captive slaves between the rollers as the vessels rolled into the sea.

This was intended to oppease the bloodthirsty pagan deities. Gradually the pagan gods became less demanding and the blood of slaughtered lambs or oxen was sufficient.

In primitive times the witch doctor or the medicine man had a monopoly on the launching of all types of vessels. Later, temple priests were gradually entrusted with the privilege of launching and naming seafaring vessels. They used a libation of red wine—symbolic of blood—to propitiate the water deities. In this they were following the example of the Greeks and Romans who spattered their war craft with red wine offered in the name of Bacchus, god of wine, and Neptune, god of the sea. Preferring, no doubt, the pleasing features of a goddess to those of Neptune, these ancients adorned the prows of their vessels with a goddess' head. Later the libation was offered to her. It was through this ancient custom that ships of the sea eventually became referred to as "she."

Although the modern practice is to have women perform the launching ceremony, it was a masculine prerogative until the 19th century. Then the Prince of Wales broke the precedent and invited ladies of the court to act as sponsors—a custom now well established.

But in ancient times, because of the taboo placed on women aboard ship, many sailors refused to sail in a vessel named by a woman. Although this superstition gradually disappeared, the taboo against launching by married women and widows persisted for a long time.

In the old days, before champagne became popular, it was the practice, instead of smashing a bottle, to spill wine on the ship and then name and launch it as the goblet was thrown overboard as an offering to Neptune. Later a net was strung around the bow of the ship to recover the offering.

Then came the era of throwing the filled bottle and breaking it on the bow of the ship. Unfortunately the bottle frequently missed its mark and hit someone. This problem was finally solved by encasing the bottle in a mesh-holder and wrapping many yards of red, white and blue ribbons around it. As much as five hours' work goes into the making of the bottle with which a ship is christened. The bottle is fitted with a "tuxedo" of 1/16-inch flexible mesh holding jacket. This prevents glass from flying into the faces of the sponsor and spectators. The remnants of the bottle, encased in the metal jacket, are traditionally presented to the sponsor.

Even in our day it is considered unlucky if the bottle fails to break when it is thrown. To prevent such a calamity, the bottle is usually suspended from the forecastle on a rope bedecked with ribbons and a "bottle catcher" stands by just in case the lady should miss her mark. Many shipyards have their own official "jinx-buster" who pinch-hits for the sponsor who fails to hit the bow because of lack of strength or a wild swing.

The jinx-buster stations himself under the official platform where he can retrieve the unbroken bottle and smash it against the ship before it has slid down the ways beyond reach.

Champagne has replaced blood and wine as the modern launching libation. It is considered unlucky to use plain water in a launching. Just for the record, most ships carry a securely placed metal plate stating when, where, and by whom the ship was launched.

Usually, the sponsor of a U. S. Navy ship is someone closely connected either with the Navy, the person for whom the ship is named, or with the construction of the vessel.

BOOKS

THIS MONTH'S SELECTION OFFERS PLENTY OF ACTION

Books selected for review this month include several that deal with military and naval strategy. Some are concerned with "true adventure" accounts of World War II, and earlier conflicts, others are cast in the future. Most may be found in your ship or station library.

War — 1974, by LTCOL Robert B. Rigg, USA, sounds as if it might be a bit of science-fiction, but it's not. It's a serious study and analysis of future military techniques, cast in fiction form. The projection into 1974 is based on the technological developments and new military thinking of today. Not only does this book predict the proportions of combat in the future but it contains a panorama of the latest products of the American military research and development program.

Drone television planes, nuclear-powered aircraft and naval vessels, antisubmarine networks, flying platforms, aerial jeeps, and the three-dimensional tactics of vertical envelopment in a grim "sanitary war" are described.

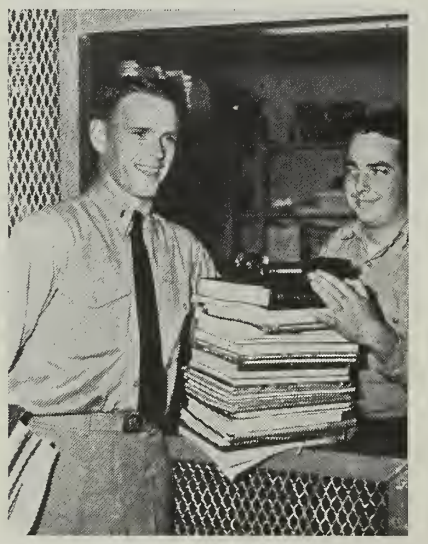
Victory Without War, 1958-1961, by George Fielding Eliot, is something else again. Mr. Eliot takes the position that the decisions made in 1958 will, whether war comes or not, determine whether we will achieve victory in the future. He presents a strong argument for the mobile, sea-based guided missile program as the strongest deterrent against war. But, he says, we've got to start now. Next year will be too late.

So much for the future. Now for the past. ***73 North,*** by Dudley Pope, is the story of a single engagement which, in effect, defeated the entire German navy. Furious because two cruisers, *Lutzow* and *Hipper*, in company with six destroyers, failed to stop a convoy steaming through the Arctic to Russia, Hitler ordered the scrapping of the entire German surface fleet — three battleships, two pocket battleships, three battle cruisers and six cruisers. This is the story of the action, and it's a hair raiser. With four destroyers, CAPT (now ADM) R. St. Vincent Sherbrooke, of the Royal Navy, fought off the attack in the dead of winter. Not one merchantman was lost. Badly wounded and blinded, his own ship near sinking, he earned his Victoria Cross the hard way.

"Now son," said the skipper of *Sturgeon* (SS 187), "you know that you're a good lookout, and you've got to stand your watch properly. There's a lot of men down below whose lives depend on the way you stand this watch." "Yes, sir," gulped the youngster as he lifted his binoculars to view the coast of Japan, "and then there's me, too."

That's the tone and spirit of ***War Fish,*** by CAPT George Grider, who tells more of the story of the U. S. submarines in the Pacific during World War II.

Possibly the most remarkable experience in this month's selection may be found in ***The Phantom Major,*** by Virginia Cowles. It's the story of warfare on a different kind of sea—the sea of sand over which the North African campaign was fought. Its hero is then lieutenant David Stirling, who, with a handful of skillful, highly trained men, raided hundreds of miles behind Rommel's lines. For 14 months, with jeeps as their vessels, they destroyed planes, blew up car parks and ammunition depots, hijacked trucks, mined roads, derailed trains, fired gasoline depots and, in general, raised havoc wherever they appeared.



FIRST student pilot to report aboard Basic Training Group Seven, NAS Memphis, was ENS C. C. Cromer. New BTG-7 will train student aviators in basic instrument procedures and radio instrument navigation.

Their technique was to hide by day in one of several oases or in a wadi near their objective, then strike swiftly across the nighttime desert. Their chief weapons, besides sidearms, grenades and sheer audacity, were Vickers machineguns and a new explosive—the Lewis bomb—which had been invented by one of their own men.

Friend and enemy — Rommel, Alexander, Montgomery and Churchill—have acknowledged the role of Stirling's raids in bringing about an Allied victory in Africa. The story of his deeds are gaudy, romantic and packed with excitement.

Ordeal by Water, by Peter Keeble, parallels the *Phantom* in certain respects. Near the end of 1941, LCDR Keeble, RN, found himself in the highly experimental field of naval salvage and a few months later also found himself dropping into the warm waters of the Red Sea in a diving suit he hardly knew how to control. From this doubtful beginning, he rose to command—as Fleet Salvage Officer—a powerful force of auxiliary vessels, salvage ships, rescue tugs and lifting craft.

Although he held a high position, he nevertheless insisted on doing the most hazardous dives himself. Salvaging a highly prized radar device —probably booby-trapped—from a German submarine in 230 feet of water, is only one of the many feats described in *Ordeal.* Time and again, Keeble and his men, the forerunners of today's frogmen, worked under terrific pressure, aware that if their work was not completed a landing might be delayed, a whole campaign ruined. A good story, well told.

The Fate of the Maine, by John Edward Weems, goes back a couple of more wars. It tells the story of *Maine* from the laying of its keel in 1888 to its burial in 1912. Woven into the story are the events that surrounded the Spanish-American War of 1898: The destruction of *Maine* in Havana Harbor; the court inquiry; the battles of Manila Bay and Santiago.

Fate is, perhaps, the first thorough history ever written of this ill-fated ship who, within two hours after she was underway, disabled her steering gear. Well illustrated, the book also contains a complete list of her officers and crew, and a log transcript.

Independence Afloat

Early in June, *Independence* (CVA 62) fourth ship of the *Forrestal* class (the others are *USS Forrestal* (CVA 59), *Saratoga* (CVA 60), and *Ranger* (CVA 61) was christened at the New York Naval Shipyard, Brooklyn, N. Y. It is anticipated that *Independence* will be ready for commissioning in January 1959. This is the story, to date, of what she can do and what it takes to build and operate a ship of this type.

It was perfect weather. An estimated 3000 spectators applauded as Mrs. Thomas S. Gates, Jr., wife of the Secretary of the Navy, cracked a mesh-jacketed bottle of champagne against the bow of Independence. *As she did so, the dirty, muddy water from Wallabout Bay was let into Drydock 5 for the ceremonial wetting of the vessel's keel. Earlier, the U. S. Naval Base Band had played the national anthem, the guests had been welcomed by RADM S. N. Pyne,* USN *Naval Shipyard commander, the principal address had been delivered by Hon. Donald A. Quarles, Deputy Secretary of Defense, and the invocation had been made by Chaplain D. F. Kelly,* USN. *The benediction had been pronounced by Chaplain J. L. Goldberg,* USN. *The following day, the ship was towed to a wet dock, and the work continued.*

FIRST *Independence* preceded Navy by several years. She was fitted out for her Navy duty in the year 1776.

ENOUGH POWER to drive more than 100 passenger locomotives is packed into the Navy's new *Independence.* The ship's propulsion equipment will develop over 200,000 horsepower, enough to drive the 60,000-ton carrier at a top speed "in excess" of 30 knots.

The turbines will operate at the highest combination of steam temperatures and pressures of any vessel built for operating use. The main propulsion equipment consists of four cross compound turbines and four double reduction gears.

Lighter and less bulky than World War II types, these turbines will also develop more horsepower and will operate at higher efficiency. In addition, they will enable *Independence* to steam efficiently at full power as well as at lower cruising speeds, in a naval task force.

ON DECK — A3D *Skywarriors* like one shown above will be one of the plane types on *USS Independence*.

The alloy steel propulsion gears, which connect the turbines to the four propeller shafts and allow both the turbines and the propellers to operate at the most efficient speeds, are also of a new lightweight design. In spite of their size and rating, these gears are 50 per cent lighter over-all than if they had been built according to WW II design.

The gears were built to totally new standards of precision manufacturing. Special measuring devices were required to check accuracy during manufacture. Load tests for the gears included operation at full power and full speed. In other tests the gears were successfully subjected to an equivalent of several years of normal operation.

Although propelling a vessel almost five city blocks long and more than a block wide, this equipment will occupy no more space than a small corner lot. Machinery spaces will occupy approximately 500,000 cubic feet of space, less than eight per cent of the ship's total cubic footage. This is a boon in today's technical Navy.

Steam for the propulsion turbines, ship's service and auxiliary turbine-generators, plane catapults, and other ship's equipment using steam will be supplied by eight oil-fired boilers. Control of the boilers, turbines, and other elements of the propulsion plant is almost entirely automatic. Operations will be directed through push buttons and levers from air-conditioned control rooms in the engineering spaces. These controls will be similar to those used in a modern electric power plant.

Habitability

Six centrifugal refrigeration machines furnishing a total of 1050 tons of cooling will provide air conditioning. The amount of cooling produced is capable of air conditioning more than 500 average sized three-bedroom houses, and is equivalent to the melting of 2,100,000 pounds of ice over a 24-hour period.

Air conditioning is needed because of the tremendous heat generated by the machinery located throughout the ship and by her all-steel flight deck. Furthermore, experts have learned that men become lethargic when they sleep and work in overheated areas, and that air conditioning, good recreation and comfortable quarters make for greater efficiency.

That's one of the reasons why *Independence* affords her 3500-man crew habitability features to be found in no other ship.

All living and working control spaces are air-conditioned. This includes crew's and officers' quarters, messing rooms, hospital country, operation and control spaces, and office spaces.

Accommodations include 3469-crew berthing in spaces varying in size from 12 to 198 men. A total of 60,000 square feet of space is required for this purpose. There are a number of recreation rooms, a library, lounges, and training rooms. Recreation spaces with special furnishings are provided within each crew living area.

ON THE BOTTOM — The Navy's new super carrier looked like this during early days of construction in July 1955.

The total space required for all living quarters amounts to 88,550 square feet. Mess and lounge areas total 55,964 square feet.

Ladders are on their way out. The crew will descend broad stairways to their quarters, recreation and messing areas. In addition, there are two electric stairs, which travel at 90 feet a minute, to carry pilots from below decks. The ship is equipped with elevators ranging from 200 pounds to 80,000 pounds capacity. Total lift is 1300 feet.

The ventilation system consists of approximately 485 separate ventilation installations, some serving several compartments and spaces, and some being for special-purpose equipment as, for example, cooling purposes. The amount of air available is sufficient to supply 20 large theaters.

Many of the working spaces, such as the pilots' ready rooms, communications and CIC, control compartments from which personnel operate the main propulsion plant, and other areas where men are enclosed for long periods, will be air conditioned.

The refrigerating machines produce cooling by centrifugal compression of refrigerant gas through the action of rotors spinning at 7170 rpm inside a metal shell, instead of by a piston inside a cylinder as in the normal household refrigerator.

For operating economy the refrigeration machines have been designed to chill fresh water which is then pumped to the central air conditioning equipment. Filtered air is passed over the cooling coils through which the chilled water is circulated.

Jet Service Power Units

Power for servicing jet aircraft is provided by two direct-connected turbine-generator sets. Each is rated at 600 kilowatts, 400 cycles, and operates at a speed of 12,000 rpm. The turbine is directly connected to the generator without any intermediate gear reduction.

Operating controls for the units are grouped to simplify starting and operation. Metallic-type shaft and valve stem packings are used throughout the equipment for longer packing life. The throttle valve and the back pressure trip are hydraulically actuated, making them highly resistant to shock. Steam is admitted to the turbine through the lower half turbine casing with a valve chest which has an integral first stage nozzle, thus decreasing the number of high pressure steam joints to a minimum.

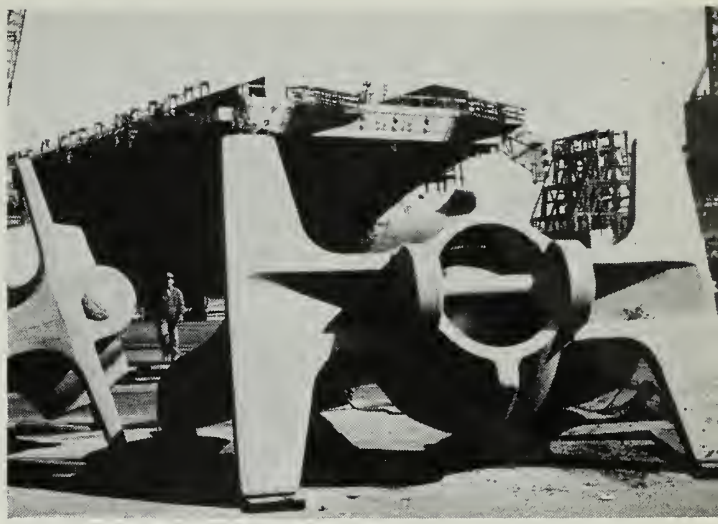
Structure

The flight deck covers 176,324 square feet, or approximately 4.1 acres. The hangar area, for handling, parking and the repair of aircraft is the main deck, covering some two acres or 95,000 square feet.

The combined working area for flight operations, including flight and hangar decks, is more than six acres. These consist of landing, spotting, take-off, parking, maintenance and refueling operations.

There are slightly more than 1500 compartments on *Independence*. They are divided like this: Crew spaces, 150; access trunks, 142; magazines, 120; tanks and voids, 892; machinery and control, 57; storerooms, 154; and wiring trunks, 16.

It might be a little messy, but *Independence* carries enough liquids within her hull to provide room for the entire crew—and their dependents—to throw a swimming party. The medium would consist of nearly five million gallons of aviation fuel, fuel oil, cleaning fluid, fresh water and fresh water ballast, diesel fuel, lubricating oil and feed water.



ABOVE is one of the 30-ton anchors for the aircraft carrier *Independence*, just prior to its installation.

The ship will have two hospital wards to accommodate 84 patients. She will be provided with complete medical services and facilities for first aid, out-patient, ambulatory and operation cases.

Throughout the ship, fireproof, fire resistant and fire retardant material has been used. This includes deck covering and all fabrics used in the 8450 items of furniture. Almost 1,000,000 square feet of fiber glass board has been installed in the hull for heat and sound-proof

SHIP SHAPE — Hull of *Independence* begins to take shape in 1956 photo taken in New York Naval Shipyard.

insulation. Insulation has been fitted around all noisy spaces, such as fan rooms, motor generator rooms and control rooms.

One material—wood—is conspicuously missing in the hull and planking for the flight deck.

Approximately 300,000 gallons of paint, enough to paint 30,000 average-size homes, is used.

For ground tackle, she is equipped with two anchors weighing 30 tons each, shackled to 180 fathoms of chain.

Four deck-edge elevators are installed for handling planes between the flight and hangar decks. Each elevator has its own power plant. For aircraft fueling and defueling, 28 stations are provided on the upper decks.

Ancestry

The family name of *Independence* is an old and honorable one in the U. S. Navy.

Preceding the Navy itself by several years, the first ship to bear the name *Independence* to fight for the United States was a sloop fitted out with 10 guns and authorized by the Continental Congress in 1776. Her first voyage came in September of that year when she was ordered to cruise along the Atlantic coast. Later ordered to France with dispatches, she captured two prizes en route. On her return the following year she was wrecked on the bar attempting to enter Ocracoke Inlet, N. C.

Independence No. 2 was our first ship of the line, a 74-gun vessel authorized by Congress in 1813. Built at the Boston Navy Yard, her dimensions were: Length 188 feet, beam 50 feet, tonnage 2,257. (Compare that with the CVA 62: Length 1,046 feet, beam 252 feet, light tonnage 54,600.)

Her first cruise came in July, 1815, as flagship of Commodore William Bainbridge for duty in the Mediterranean Squadron. After making a show of force at several Barbary ports, *Independence* returned to the States, arriving in November 1815.

Four years of routine duty followed, and from 1819 to 1835 she was laid up at Boston. In 1836 she became the first 74-gun ship to be razed (cut down to two decks, having one covered fighting deck with poop and forecastle decks), with 54 guns. She sailed from Boston in May 1837 and established a speed record crossing the Atlantic, arriving at Portsmouth, England, in 23 days. Later that year she was made flagship of the Brazil Squadron until return to New York in March 1840.

During the Mexican War *Independence* was flagship of the Pacific Squadron. Her first encounter with the enemy resulted in the capture of the Mexican ship *Correo* and a launch. Later she was present during the capture of two enemy strongholds, finally returning to Norfolk in May 1849.

Several years of Mediterranean and Pacific duty followed, and in October 1857, she berthed at Mare Island to be converted into a receiving ship. From 1857 to 1912, for 55 years, she remained as such, being placed out of commission in November 1912. In September 1913, she was sold for scrap.

The third *Independence* was a cargo steamer built at San Francisco and commissioned in 1918 into the Naval Overseas Transportation Service. After delivering a cargo to Weymouth, England, she returned to New York and was placed out of commission.

The fourth *Independence* (CVL 22) was the first of several aircraft carriers to be converted from cruiser hulls. Built at the New York Shipbuilding Corporation, Camden, N. J., she was commissioned on 14 Jan 1943.

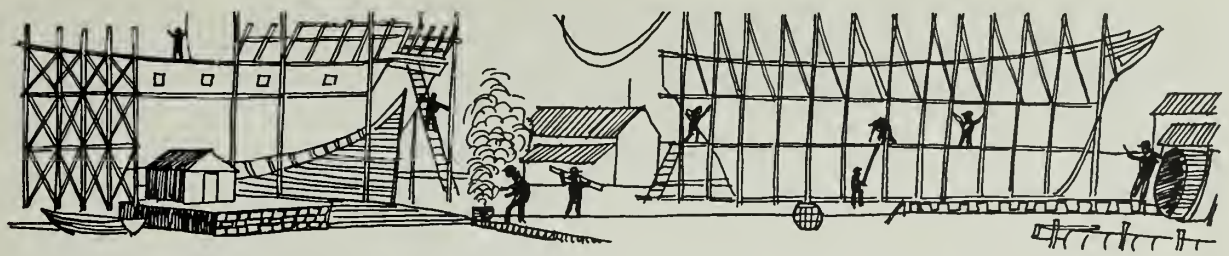
Her first battle action came in September 1943, when she participated in a raid on Marcus Island. Then in short order came strikes at Wake Island, and Rabaul, New Britain. During the latter operation she was attacked by Japanese planes, and when it was over *Independence* had chalked up her first six planes shot down.

While operating as part of the covering force for the Marines' landing on Tarawa in November 1943, CVL 22 was hit by three torpedoes launched by enemy aircraft. Only one exploded, and the ship was able to withdraw under her own power. She returned to San Francisco for repairs. Repairs completed, she was back at Pearl Harbor for operational training of the first night air group, and was to become the first night operating carrier.

Returning to the combat area in September 1944 the battle-tested carrier took part in the capture and occupation of Southern Palau and strikes in the Philippines. In October she supported the landing at Leyte, which led to one of the biggest naval battles in history.

The Japanese had decided to contest the Leyte landing with the remnants of their once powerful fleet. Admiral Halsy's big carriers were ordered to meet the threat of

INDEPENDENCE OF World War II fame is shown after she was exposed to atom bomb in first test at Bikini.



New York Naval Shipyard, Birthplace of Independence, Has Long History

The birthplace of *Independence*—the New York Naval Shipyard—is one of the largest—if not the largest—industrial plants in the State of New York, but it all began with the purchase of a small crescent-shaped piece of land in the vicinity of Wallabout Bay, about half a mile wide and half a mile long.

The original property, a shipyard bought and operated by John Jackson and his brothers, was bought in February 1801 for $40,000. At that time, it consisted of a few ramshackle buildings used to house the wooden sailing vessels during construction, a sluggish pond called the "timber pond" where the oak beams and planking were aged and seasoned, and a muddy island on which a storage pier had been built.

Its first important role was during the War of 1812 when it fitted out more than 100 ships. The first ship actually to be built here by the Navy, however, was the 74-gun frigate *Ohio*. Begun in 1817, she was the largest ship built in the United States up to that time. She was considered "a perfect beauty" and, after a long career, was used as late as 1879 as a receiving ship in Boston and was finally sold in 1883.

By the time the Civil War began, the Yard had become sufficiently organized so that it could build 16 new ships during that conflict. Besides this new construction, the Yard converted and outfitted 416 commercial vessels bought by the government for use as warships.

The treatment given *Monticello* in 1861 was typical of the spirit of the times. As soon as she appeared in the yard, every available man was put on the job. She had been a passenger and mercantile ship, but silken tapestries and velvet hangings were ripped down; inlaid panels were torn out mercilessly. Within 24 hours from the time she entered, her armament was in place and she was ready to go as a fully equipped war vessel.

One of the most famous ships built by the Yard was USS *Maine*. Completed in 1895, she was a steel twin-screw forerunner of the battleships. She displaced 6682 tons and had 10 guns in her main battery. To accommodate such a huge ship, the launching ways had to be rebuilt.

By the start of World War I, the Yard had become big business. Besides construction of 40 new submarine chasers, the battleships USS *New York* (BB 34), *Arizona* (BB 39), *New Mexico* (BB 40), and *Tennessee* (BB 43) were built, and construction on *South Dakota* (BB 57) and *Indiana* (BB 50) begun. (*South Dakota* and *Indiana* were scrapped as a result of the Washington Naval Armament Limitation Treaty of 1922).

The Yard was equally busy during World War II. From Pearl Harbor day until the end of the war in 1945, the Yard repaired more than 5000 ships, converted approximately 250 others, and built the battleships USS *North Carolina* (BB 55), *Iowa* (BB 61) and *Missouri* (BB 63) and the aircraft carriers USS *Bennington* (CVA 20), *Bon Homme Richard* (CVA 31), *Kearsarge* (CVA 33), *Franklin D. Roosevelt* (CVA 42), *Oriskany* (CVA 34), *Saratoga* (CVA 60) and *Independence* (CVA 62).

USS *Constellation* (CVA 64), scheduled for completion in 1961, is also under construction at the New York Yard.

the enemy's carriers to the northeast. Meanwhile, however, the Japanese battleship forces pressed home an attack against 16 small carriers which had been supporting the landing. Two of these baby flattops were sunk before the Japanese, fearing a trap, pulled out. *Independence* emerged unscratched, and shortly after this epic encounter was engaged in strikes on Luzon and other enemy strongholds in the Philippines. After a brief respite at Ulithi, CVL 22 was back for the landings at Lingayen in January 1945, making strikes also on Formosa, the Ryukus, Indo-China, Hainan and the China coast.

From February to March 1945 *Independence* underwent a minor overhaul at Pearl Harbor. When ready for sea again, she left on what was to be a 62-day operation in support of the Okinawa operation. This was followed by 35 night strikes against the Japanese homeland, and endless sweeps, patrols and support missions over Kyushu preparatory to invasion. During this period the ship's air group was credited with the sinking of the cruiser *Oyodo*. The group continued surveillance flights of the Japanese homeland, searches for prisoner of war camps, and was finally assigned the duty of covering the landings on Japanese soil at the war's end.

After several Magic Carpet runs, *Independence* was assigned as a target vessel for the atomic bomb tests at Bikini in July 1946. The carrier was badly wrecked by the explosion, gutted by fire, and further damaged by internal explosions at her position one-half mile from ground zero. In a subsequent test the ship again survived, although by now she was highly radioactive. Towed to Kwajalein, she was eventually decommissioned on 28 Aug 1946.

Independence was berthed at Hunters Point, San Francisco, where radiological studies continued until 1951 when she was sunk off the California coast in special tests of new aerial and underseas weapons. She was stricken from the Navy list on 27 Feb 1951 but not before she had earned eight battle stars for operations in the Pacific area. That's a reputation to live up to.

TAFFRAIL TALK

ALL HANDS had an interesting visitor recently. He was Capitao de Corveta (or LCDR) Levi Scavarda of the Brazilian navy. Mr. Scavarda is "secretario" of the Brazilian *A Marinha em Revista*—which might be called the Brazilian ALL HANDS.

At one time a sailor (and *in sail*, as he hastens to tell you), Mr. Scavarda worked up to chief, was commissioned, and has over 42 years of service. An expert in documentation and publication, Mr. Scavarda is former director of the Brazilian navy's division of naval history; is a writer of books and histories; and the possessor of a fine knowledge of ships and the sea.

Until later this year, Mr. Scavarda will be studying publications, museum and archives in the Washington, D.C., area, after which he'll return to Brazil and his second consecutive summer (the seasons below the equator are opposite to ours).

The Brazilian navy celebrated 150 years of service to the nation on 7 Mar 1958. *A Marinha em Revista* signalized this happy event by a special issue telling of their history, their sailors and their Marines. We note in some of their issues that they play a game called *futebol*—in fact, the Brazilians have just won the world championship in this game (we call it soccer), a game that is probably the most widely played of all sports. From their magazine we also learn that they play *basquetebol, volibol,* and also go in for *boxe.* There's a lot more we could point out about our good friends in that country below the line that is larger than we are—even with Alaska—but we suggest you look it up for yourselves. Above all, you should see and meet some of these fine Brazilian navymen—there's a great deal to this People to People business.

★ ★ ★

IN ADDITION to the roar of jets, the thundering hoofbeats of 22 horses, the braying of one vagabond jackass, the strutting of several homeless peacocks, the bewildered moos of cattle and the frisky antics of two spunky colts make for new adventures at NAS Miramar.

This conglomeration establishes the residence and creates the setting for the air station's largest and most widely accepted special services project, a real honest-to-goodness western type riding stable.

The "Jet Ranch" corral—which features a 150- by 300-foot riding arena—encompasses about two and one-half acres and nature has provided probably the most perfect locale for a stable in the southern California area. Amply endowed with groves of eucalyptus trees, bushes and hills, the Camp Elliott property (which takes in about 60,000 acres) provides both horses and riders with ideal conditions for riding, sightseeing, comfort, action and fun.

From an imposing clump of trees and a barren patch of ground, Miramar's Jet Ranch has risen to be one of the biggest morale boosters for hundreds of sailors and Marines, and their dependents as well, at this large Naval Air Station. The ranch offers them a chance to relax, have fun and excitement, and in many cases, offers a touch of home. All in all, it's just a little more than what one would expect to find at a naval installation.

The All Hands Staff

The United States Navy

Guardian of Our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families.

Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

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The Bureau invites requests for additional copies as necessary to comply with the basic directive. This magazine is intended for all hands and commanding officers should take necessary steps to make it available accordingly.

The Bureau should be kept informed of changes in the number of copies required.

The Bureau should also be advised if the full number of copies is not received regularly.

Normally copies for Navy activities are distributed only to those on the Standard Navy Distribution List in the expectation that such activities will make further distribution as necessary; where special circumstances warrant sending direct to sub-activities the Bureau should be informed.

Distribution to Marine Corps personnel is effected by the Commandant U. S. Marine Corps. Requests from Marine Activities should be addressed to the Commandant.

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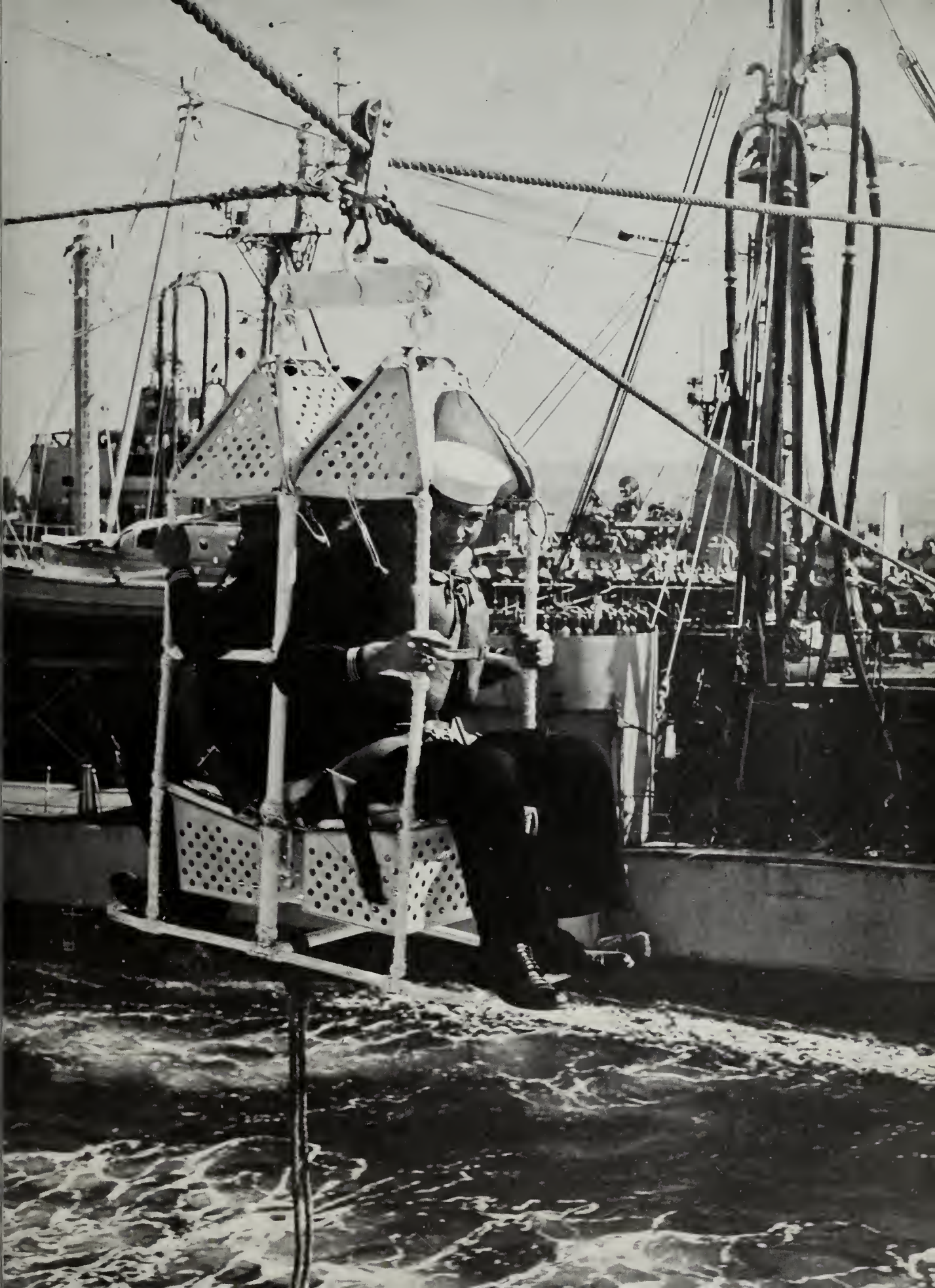
• AT RIGHT: RIDING HIGH — Cruisermen take a ride in bosun's chair as they are transferred by highline at sea from USS *Chukawan* (AO 100) to USS *Salem* (CA 139).




DRIVE SAFELY

ALL HANDS

SEPTEMBER 1958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ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

SEPTEMBER 1958 Nav-Pers-O NUMBER 500

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• **FRONT COVER: MIDNIGHT SUN** of Antarctic shines above *USS Atka* (AGB 3) and *USS Glacier* (AGB 4) as the ice-breakers make careful passage through bay ice of Kainan Bay off Ross ice shelf during cruise to Little America V. Small ball over *Glacier*'s mast is sun's reflection in camera lens.

• **AT LEFT: EYE WITNESSES**—In the Mediterranean, Secretary of the Navy Thomas S. Gates, Jr., and Vice Admiral Charles R. Brown, watch Navy jets of Sixth Fleet being launched from deck of *USS Saratoga* (CVA 60).

• **CREDITS:** All photographs published in ALL HANDS are official Department of Defense Photos unless otherwise designated.

NAVY AT THE SOUTH

You've been reading a lot recently in the nation's press about the heroic accomplishments of Navymen sailing under the North Pole. But the Navy has been busy at the South Pole too.

The following report will give you a general idea of the different phases of operations at the various locations of Operation Deep Freeze III during 1957-58. This is a penguin's eye view of what it was like.

IT DOESN'T MUCH MATTER where you are located on this globe. Sooner or later, you can expect visitors. This is true even though your location happens to be somewhere near the South Pole.

The men connected with Operation Deep Freeze III found this to be so.

If you were to visit one of the most isolated outposts of the U. S. Navy, the chances are that you would arrive at the Amundsen-Scott IGY South Pole Station. You'd find that this small, smoothly running establishment was designed and built for a small group of Navymen and scientific observers. But, regardless of your rate, grade, rank or status, you wouldn't expect to become just another sidewalk superintendent, because here everyone works—even visitors.

Suppose you've just arrived. Here are some of the things that are expected of you.

The cleanliness of spaces assigned to you is your responsibility. When fuel is needed for the stove burning in your space, you can walk outside where you will find a 480-pound, 52-gallon barrel of diesel fuel waiting to be rolled in.

But you can't use this fuel unless it has first been warmed because, as is, it will freeze the carburetor of the stove. At this location fire is a great friend but it is also a great enemy. So, you automatically become a firefighter in readiness, and you fall in with the station fire drill.

Next is the water supply. Even though this station is situated on an icecap over 8000 feet thick, you will quickly find out that the water here is conserved just as it would be in the desert. Each man must spend time at the bottom of a snow mine, chipping hard ice with an ice pick and shovel to be put into bags and brought to the surface for melting.

The whole process involves handling ice bags at least five times. Do this a few times and you'll learn something about water conservation —fast.

The station cook needs help to prepare meals for such chores as washing dishes and swabbing the deck. You will find yourself assigned to this detail. You will learn to cut both ends out of each can you use and flatten the can to conserve trash space. At in-between snacks, you are expected to clean up after yourself.

Summer at the South Pole

During the summer season you concentrate on getting the outside work done. Summer is three months long. There are chores such as rolling in barrels of fuel from the outside and caching them in the tunnel system. These are hand-rolled over distances up to 100 yards, stacked three to four high to a total of over 900. Every additional hand is needed and

your help is greatly appreciated.

Walking is the byword since vehicles are used only for necessary trips.

It takes a while to understand icecap isolated living. If you fail to carry your part of the load you will find, after a few days, some grumbling about it on the part of others. No one will be discourteous, but no one will go out of his way to increase the pleasure of your visit either.

But if you do your share you will find the station is yours. Walks and even a ride over the icecap will be set up for your experience and pleasure. Someone will come up with a beverage of some sort, sit down and just chew the fat. Before you know it a shovel will be in your hands, you'll be warmly dressed and taking off over the icecap—an Antarctic explorer. There's real esprit de corps down there.

A Typical Antarctic Base

Little America V, often referred to as "The Capitol of Antarctica Sun" is more than just another U.S. Navy-IGY base in the Antarctic. It's a pulsating community of 109 womenless men, with thoughts of home but

POLE

with a job to be done "on the ice."

Little America V, the fifth base bearing the name, was begun in late 1955 by the men of Deep Freeze I, with construction continuing through Deep Freeze II and III. It encompasses over 60 buildings and passageways covering over one and one-quarter acres of floor space. Not every building is separate; there are lots of connecting "annexes," each of which was erected to satisfy a specific need in the growing community. Every square foot of space is accounted for.

The spaces include 6272 square feet of living quarters; 12,259 square feet for working; 21,700 square feet for storage; 7253 square feet of passageways (those passageways are important) and 7568 square feet of community facility space.

The working space is available for the various scientific programs, vehicles and building maintenance, communications and other services normally provided in any small city.

Southernmost City Hall

Little America has its own city hall, post office, movie theatre, chapel, library, ships store, sick bay, dental office, recreation hall, gym, ham radio station, photographic processing laboratory and even a steam bath. It also has a "city" airport called Kiel Field.

The major portion of Little America facilities are located in an area 485 feet long, 350 feet wide, and are connected by a tunnel network.

In addition to being the city which houses both the Antarctic IGY headquarters and the commander of Antarctic support activities, Little America is a second Grand Central Station. Though its trains are of a different breed, Little America is the Antarctic hub for traverse parties and tractor trains. They keep a pretty good schedule, despite the weather.

Blizzards can strike any of the Deep Freeze III camps at any moment. High winds with peak gusts of more than 100 mph drive snow through the camps. Temperatures drop way down into the minus column and storms can last for days.

On such occasions outdoor activities come to a screeching halt. Local and intercontinental flights are postponed, since runways become badly drifted and blowing snow works its way into even the smallest openings of planes. Entrances to buildings are blocked by picturesque drifts. Chimneys packed with snow cause backdrafts. Visibility becomes zero. Movements of men from building to building must be reported.

To the Rescue

But when the weather is good, there's a scurry to get things done, particularly exploration.

What started as an interesting but routine flight on 21 January over unknown territory, between Byrd IGY Station and Amundson-Scott IGY Station at the South Pole, turned into a kingsize adventure for the crew of an R4D-8 based at Little America.

TRAIL-BLAZING is job of Navymen during IGY operation at South Pole.

COLD JOB—Navymen stop to make repairs on their crevasse detector while trying to locate safe trail over ice and snow full of deep holes and cracks.

Two hours out of Byrd Station, as the plane was cruising at 8000 feet in a cloudless sky, the mechanic noticed oil leaking from the port engine. With the rugged Horlick Mountain range looming just ahead, the plane commander, LCDR Conrad Shinn, USN, decided to return to Byrd Station.

While turning he observed a trail of smoke coming from the engine and immediately descended to examine the snow surface. It appeared smooth. On making the ski landing he discovered that the port landing gear had collapsed and the engine was heavily smoking.

The crew cut the engines, secured oil lines and electrical circuits and removed survival gear to a safe distance. The engine could be repaired, they discovered, but the plane needed a replacement for its landing gear.

Radio contact was established between McMurdo, Little America, Byrd and Pole Stations.

A repair crew stripped parts from an identical aircraft at Little America, put them aboard a rescue plane and they were soon on their way.

While waiting near their downed plane, the crew set up "Camp Charger," named after the aircraft and a stuffed toy koala bear that was carried as a mascot. A snowblock house with orange parachute for a roof was erected along with tents. Duties were assigned and stock taken of rations on hand—just in case.

When the rescue party landed, they were greeted with enthusiastic shouts. All hands turned to for 18 hours, in zero temperature and a 15-knot wind, to remove the damaged gear, install the replacement and check it. Much of the work was done barehanded. The only break in the work was to eat one hot meal of roast beef and all the trimmings served by Camp Charger.

After the plane was repaired, both aircraft made normal JATO takeoffs and returned safe to Little America. All in the day's work.

Seeing Antarctica by Air

This territory is big.

Before a traverse party or tractor train leaves from one station to another, reconnaissance flights with exploration parties aboard are sent out in advance to check over the layout of this treacherous land.

One of these was a three-hour flight around the vicinity of Ellsworth Station which disclosed the terrain to be unpassable by surface. Snow-covered crevasses permeated the snow fields south for about 50 miles and westward beyond Gould Bay.

The crevasses ended in a rift about two-and-a-half miles across and some 250 feet deep. Snow-covered crevasses and open pot holes began to show up on the surface about eight miles south of the station. These looked like honeycombs and formed a network of dangerous criss-crossed cracks that can spell disaster to a party traveling on the surface. As the plane skimmed closer to the surface, the holes looked black, ugly and bottomless.

A closer inspection from the ground disclosed snowy ramps about one-half mile wide crossing the rift, running north and south. These arch-shaped ramps were heaved high into the air, with the uppermost section split into triangle wedges. Deep canyons formed sheer walls 30 to 40 feet across.

The exploration party came to the conclusion that, even if a traverse party could travel through the multitude of crevasses to this point, these obstacles would prevent further progress south. Flights such as these can save a traverse party on the ground many days of needless travel.

Finding a Trail

Another exploratory flight from Ellsworth Station probed the unknown area deep into Edith Ronne land in October. Rugged mountains and previously undiscovered features were unfolded.

At about 10,000 feet the plane climbed through a haze bordering on white-out conditions with visibility limited to 10 miles. Minutes later the haze suddenly disappeared. Formidable mountain ranges came into view, towering in front of them.

No Time for a Hangover

No matter where you were on New Year's Day the men at the South Pole Station either celebrated at the same time you did—or before. Since all time zones converge at this point, the stroke of midnight can be observed 24 times.

At midnight (in all 24 cases) the sun is shining brightly.

Last New Year's Eve the men held a typical American picnic in minus 20 degree temperature. The station cook provided hot dogs with all the relishes. These were roasted over a fire which was also used to warm the ice cream so it could be eaten. Blankets were spread on snow.

Although there were no worries about ants and flies, DDT was provided—just to give a touch of home.

There is little or no basis to the claim that "Auld Lang Syne" was sung 24 times.

These mountains spread a hundred miles or so in an east-west direction and extended south beyond the horizon to less than 400 miles from the South Pole. Lofty, bare and snow-covered peaks, rising to 11,000 feet, stood out as the plane flew alongside the mightiest ones. The altimeter readings gave the foothills 5000 feet.

Before the flight had ended the exploration party had discovered an easy trail in a southeast direction from the barrier rift.

What's It All For?

The International Geophysical Year, which started 1 Jul 1957, is the third such in the history of the world. The first was in 1882; the second, in 1932. The scope of each has progressively increased.

Scientific areas in which investigations are now underway as a part of the present IGY include: Aurora and airglow, cosmic rays, geomagnetism, glaciology, gravity measurement, ionospheric physics, meteorology, oceanography, seismology, solar activtity, longitude and latitude determination, rocket exploration of the upper atmosphere, and satellite exploration of the upper atmosphere.

Roughly the size of the United States and Europe combined, the Antarctic continent serves as an ideal laboratory for many of these IGY studies. Approximately 40 nations are participating in IGY and, of these, 12 have built 46 stations in the Antarctic.

Interest of the United States in the area long preceded IGY but it was not until 1954 that we decided to move in more or less permanently. During the winter of 1954-55, USS *Atka* (AGB 3) surveyed the ice conditions of the Antarctic and attempted to find a favorable coastal site for establishing a base station.

Deep Freeze I

The 1955-56 mission (Operation Deep Freeze I) was organized to build the Little America Station and the Naval Air Facility at McMurdo Sound. In addition, equipment and supplies for the construction of Byrd and Pole stations were transported to Antarctica.

Other installations included Wilkes Station on the Knox Coast, Ellsworth Station on the edge of the Weddell Sea, and a base jointly maintained with New Zealand at Cape Hallett.

Up through 1957 the U. S. spent some $32 million in building bases for scientists in the Antarctic. The scientists chose the location of these bases and it was the Navy's job to put them where they were wanted.

DEEP FREEZE, DEEP FREEZE—Ice- and snow-laden tunnel serves as natural freezing unit as well as trail under the snow during Antarctic night.

The first effort at base-building took place in the Ross Sea during Deep Freeze I, when the Little America Station and McMurdo Sound air operating facility were built. These bases served as staging areas for the construction of Byrd Station and South Pole Station. Byrd Station was a tractor-train operation with air support, while the South Pole Station was an air-drop mission.

Deep Freeze II

Deep Freeze II started when Rear Admiral George J. Dufek, USN, landed at McMurdo Sound in a Navy plane, in October 1956.

Following him a few days later were the other Navy planes that were used for lifting personnel to the South Pole and Byrd Station. (One of these planes crashed on landing and four men were killed.)

The Air Force landed the following week in *Globemasters* and started packaging the material for dropping at the South Pole, by parachutes. The base was completed within a few weeks and scientific studies at the Pole were begun.

An Army-Navy trail party flew to Little America and began the trip to Byrd Station, marking a safe trail over the ice for the heavy tractors and sleds that followed. Byrd Station was commissioned on New Year's Day, 1957.

Cargo for the South Pole and Byrd Stations was off-loaded at McMurdo Sound for air-drop during Deep Freeze II. Other new bases were constructed at Cape Hallet, Knox Coast, and Weddell Sea. One man was lost through the ice of McMurdo Sound while driving a weasel. In all, Deep Freeze II cost five lives.

Deep Freeze III

Deep Freeze III executed a plan to use minimum forces to resupply the stations established in the Antarctic during Deep Freeze I and II in support of the United States National Committee for the International Geophysical Year.

The basic mission was to resupply the established stations, replace worn out equipment, perform supplementary construction, transport relief scientific and naval personnel to the Antarctic, and finally, to return the relieved personnel to the continental United States.

The summer support phase of Deep Freeze III came to an official close 31 Mar 1958. Staying behind in Antarctica are 347 Navymen, civilian scientists and technicians who man the bases during the winter season.

The first ships to arrive in the Antarctic were the icebreakers USS *Glacier* (AGB 4) and *Atka* (AGB 3)

and the cargo ship USNS *Greenville Victory* (AK 237) at Little America on 1 December. *Glacier* was the last ship to leave the continent, departing from Cape Hallet Station 13 Mar 1958.

In addition to the resupply mission, 10 Deep Freeze ships conducted scientific studies over 33,000,000 square miles of water surrounding Antarctica. Most of the work was meteorological and oceanographic, but other studies were made as a supplement to the regular IGY program.

Planning for No. Four

Planning for Operation Deep Freeze IV is underway. Four of the seven Antarctic bases (Pole, Byrd, McMurdo, Cape Hallet) will be resupplied and their personnel replaced during the Antarctic summer season beginning in October.

The other three bases will either be reduced drastically in operations (Little America), turned over to Australia (Wilkes), or the future is uncertain at present (Ellsworth).

Out With a Traverse Party

On 24 Oct 1957, seven men started out from Little America Station in three snocats (specially built tractors) on the first leg of a 1500-mile ice traverse. The snocats towed three two-and-a-half-ton sleds loaded with equipment and provisions. It was expected to take until 15 February to cover Ross Ice Shelf between Little America and McMurdo Sound, then up to Beardmore Glacier followed by a swing back to Little America—an area about the size of France.

Navy planes of VX-6 supported the traverse party, landing alongside about every 10 days with fuel and provisions.

Tests were scheduled to be made of ice thickness, water depth, ice surface elevation, magnetic field strength and magnetic compass variations, and seismic velocity change with depth.

The party also took gravity observations, recorded weather data, surveyed mountain peaks and ranges along the traverse route and studied Sastrugi patterns (wind drift patterns).

Traveling every other day, scientists set up 50 stations about 30 miles apart on the trail. Allowance was made for 25 days' bad weather. Another eight days were set aside for special observations in the vicinity of the Beardmore and Shackelton Glacier area.

The snocats played leapfrog during the complete traverse to get ice shelf elevation data. One cat would move five miles out in front, then the second would catch up. When the third cat moved up, the first would move out ahead again.

This was done to get three separate and more accurate readings.

One two-man tent was carried, but the Navymen slept inside the snocats in most cases. Each cat carried emergency rations. The main messing vehicle carried over 400 pounds of food.

On the other side of the continent, a similiar IGY traverse party was exploring Edith Ronne Land. This party had departed Ellsworth Station on 28 October. But it ran into trouble.

Needed: One Universal Joint

On 14 November, the traverse party came to an abrupt halt when it hit a stretch of undetected—and unexpected—crevasses.

The leading snocat found them by simply falling through.

It found itself resting on the after part of its body, with its rear pontoons dangling gracefully over a bottomless cavern that could easily have swallowed a large airliner. Its

Mail Call in the Antarctic

Probably the most popular cargo to come into these outposts is mail. This was certainly the case for the men at Little America. They hadn't received any from 10 Mar 1957 until 1725 on 12 October, when a Navy *Neptune* (P2V) arrived from McMurdo. It brought over 800 pounds of mail.

The postal clerk was besieged by volunteers to help sort the precious cargo. When mail call sounded all activity stopped except critical work.

For awhile, a strange silence came over the camp. All hands abandoned themselves to reading long-awaited letters from home.

The silence was soon broken and the air was filled with the chatter of men swapping newsbits and snapshots.

About the same time, similar events were experienced at McMurdo, Byrd, Pole and Hallet Stations. The men at Ellsworth and Wilkes Stations had to wait until January, when ships were able to penetrate the heavy ice and resupply these stations.

DRIVE WITH CAUTION—Weasel with crevasse detector carefully approaches chasm indicated by depression in snow.

wall dropped straight down to seemingly eternal darkness.

The men eventaully succeeded in wedging the snocat on solid surface. After probing, they found that extensive patterns of hidden crevasses honey-combed the entire area. These could not be seen from the air as they were well hidden by a light cover of newly-fallen snow. The crew also found that the universal joint of the snocat was damaged beyond repair.

A replacement was needed before they could move. A message was sent back to camp.

The crew of the plane which ultimately arrived with the necessary gear learned the quick way the inner meaning of that somewhat stuffy phrase "hazardous terrain."

One of the plane crew casually walked a few feet away from the aircraft to stretch his legs. Next thing he knew he found himself in a crevasse some 20 feet below the surface, sprawling on a snowbridge ledge with huge black holes on either side.

A wire ladder brought him back to the surface, completely purged of any desire to wander.

"Man, those big black holes looked ugly," he commented. "I'll fly combat missions any day to walking around here."

But to the Navy ice explorers, it proved once again the value of the list of safety regulations that had been set up.

Working Up an Appetite

Navy cooks on Antarctic duty meet problems not found in other Navy galleys or home kitchens. Three cooks at the Little America Station fed the 109 men who wintered over during 1957.

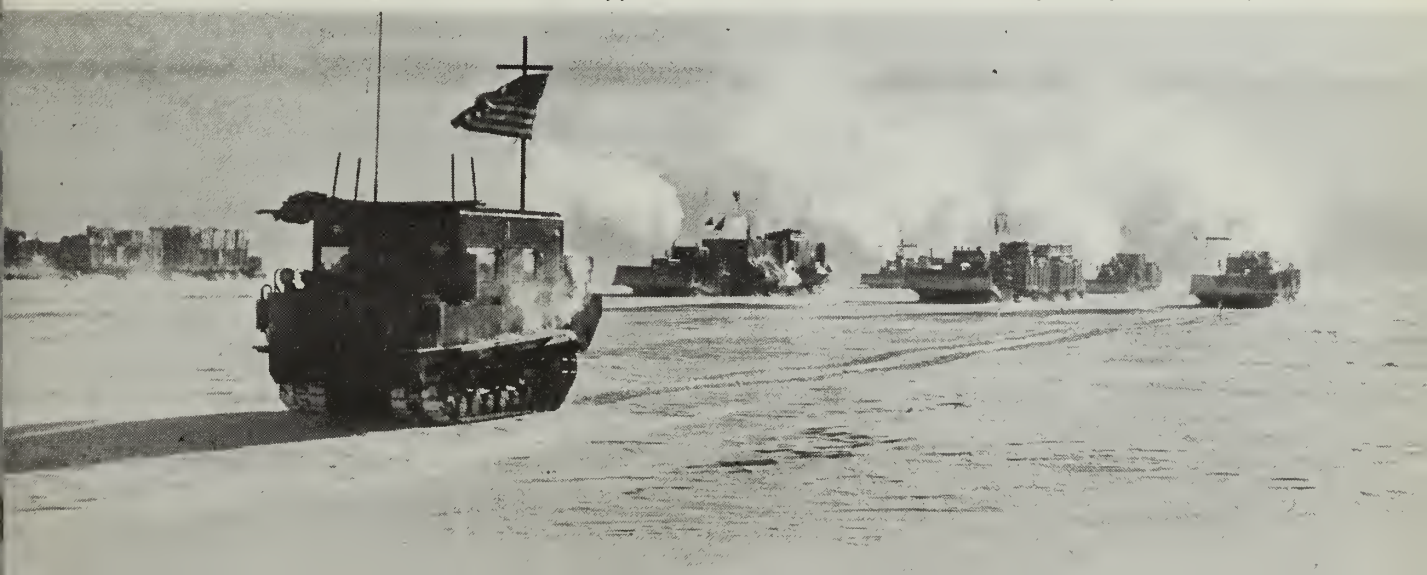
Feeding was family style. Three regular meals were served, with an additional one at midnight for night crews.

Except for a short period before and after each meal, the mess hall was open the full 24 hours so that men could grab a cup of coffee or cocoa with a snack. Studies during the winter showed that each man ate an average of seven pounds of food a day.

Preparation of all meals was done over a single range. Only the constant repairs by resourceful Seabees kept it going. Cooks split the work. One baked bread, cakes, pies and other pastries at night while the other two worked in shifts preparing meals. The big job at the start was the transportation and sorting of food from the edge of the ice bar-

SKY SCOUTS in Navy UC-1 *Otter* fly over large open crevasse near Ellsworth Station. Such flights over unknown areas save work for the trail-blazers.

TRACKLESS TRAIN moves out over ice with supplies for inland bases being used by Navy and IGY personnel.



SNOW JOB—Navy Seabees turn to with shovels to dig out building materials covered by snow while building Deep Freeze headquarters at Little America.

rier where it was off-loaded from ships.

Then everything was stored in segregated stacks making it easily available. One of the problems that plagues housewives didn't bother the Navy cooks. This was food storage—here the whole place is a natural storage plant.

The real problem was thawing food out on time. To insure quality and taste, cooks started meals two days in advance.

The menu was scientifically planned and carefully balanced within available means. The job of putting variety into meals taxed the cooks' ingenuity. But the men being fed attested to this success.

They had lots of variety: spaghetti, macaroni and cheese, Spanish rice, stews and pizza, interspersed with steak, beef, ham, veal, pork, rabbit, liver, hamburger, meatloaf and frankfurters. Over 10,000 pounds of fresh vegetables were available.

Desserts were plentiful. Among the favorites were chocolate coconut pie, strawberry shortcake and ice cream sundaes. Liquids served included cocoa, coffee, lemonade and fruit juices of all kinds.

The Supply Problem

Off-loading supplies in the Antarctic may sometimes be a tricky business, and no matter what the problems, it is always tedious. Consider the off-loading difficulties which were experienced while resupplying Little America last December.

A 10-foot thick sheet of ice extended three miles out from the Ross Ice Shelf at Kainan Bay.

The two ice breakers, uss *Glacier* and *Atka* chipped away. Demolition teams used 2000 pounds of TNT. The ice wasn't even dented. Storms and northerly winds came along to call a halt to the proceedings. And *Glacier* was hampered by the loss of one blade from the port propeller, lost while plowing through an ice pack en route from New Zealand.

Waiting for a channel to be opened was USNS *Greenville Victory*, standing outside the entrance with 3000 tons of supplies. A helicopter was used to bring Navy and IGY personnel ashore.

After three days of hammering away at the ice, five helicopters were brought into play. They began shuttling supplies ashore. Most of the supplies were carried in cargo nets suspended beneath the helicopters. Some were carried inside. The shuffle of supplies continued around the clock.

Once the supplies reached shore the plan called for all equipment, including nine D-8 and four D-4 tractors and eighteen 20-ton sleds to be put to use. Two snow roads running most of the way from the camp to the barrier edge were used for coming and going traffic. There was a single road through a crevassed valley where only one vehicle at a time could fit. Jeep-like radio-equipped weasels were stationed along the route to keep traffic moving. Further plans called for sorting the supplies at the camp. Then a tractor train would head out for Byrd Station on the 647-mile trail with the IGY equipment and food supplies destined for that base.

During the fourth day of operations a weasel, while searching Kainan Bay ice for a cargo movement trail, tipped sideways in an unsuspected tidal crack, twisting the whole vehicle 90 degrees and turning it over on its side. A helicopter hovered overhead, landed and returned the uninjured crew of three to Little America. Later, the undamaged weasel was pulled out.

And on this same day, *Glacier* bulled her way through 1200 yards of ice.

After a 10-day effort the ice breakers crunched their way through a channel about 100 yards wide. *Greenville Victory* moved in stern first (just in case she had to make a quick departure) and began disgorging supplies onto the ice.

Rolling stock was first over the side and was driven off under its own steam. The bulk of the cargo was lowered to waiting sleds on the bay ice and hauled away by heavy tractors. *Glacier*, her job finished, sailed for McMurdo. Five days later, *Greenville Victory's* holds were empty and she and *Atka* also departed for McMurdo. Mission accomplished.

Solving the Traffic Problem

You've probably run across the phrase somewhere in your reading about the "untamed Antarctic." But, according to the drivers at the Little America Station, this just isn't so.

They figured that civilization was

Even the Batter Wears Mitts

With all of the work that goes on in the Antarctic, there is still time for sports. In fact, a softball game, played at Little America, has officially been recorded in the archives of baseball's Hall of Fame at Cooperstown, N.Y., as the coldest softball game played.

The game was a two-inning affair played between the civilian scientific personnel and Navy Seabees who wintered over at the Little America Antarctic outpost.

The game was played in "Seal Stadium" on 23 Aug 1957, the first day the sun was seen following the long dark winter night. The players had to hit — or at least swing — to keep warm. The game ended in a Navy 11-6 victory when the temperature of minus 41 forced the players to return inside the snow-covered buildings.

WHITE-OUT—Sudden blinding snow storms with high winds are constant danger to men and planes at Antarctic.

on its way to the South Pole when their highway traffic speed came under the control of radar.

It seems that there was a mile-long stretch of road at Little America where vehicle operators had to watch themselves—or the "electric cop" would get them. Then they'd have to tell their tale of woe to a stern-faced judge—in this case, the officer-in-charge of Little America.

The radar, slightly different from that found Stateside, proved to be just as effective. This radar was normally used for GCA operations at Kiel Field, to govern the road from the main camp to the airstrip.

The speed limit was set at 10 mph. Strict enforcement of this limit was necessary to keep maintenance down on tracked vehicles. It was found that a higher speed over rough terrain had a tendency to snap tracks.

Punishment for "hot rodders" was effective. Driver permits were in jeopardy and offenders were faced with walking whenever they wanted to go anywhere. And in the Antarctic, that's about as stiff a punishment as you can get.

Riding the Tractor Train

A resupply tractor train left Little America on 1 October carrying IGY equipment to Byrd Station. The train started on the 647-mile trip with seven D-8 caterpillars, nine 20-ton sleds, three 10-ton sleds, three wanigans, (used for sleeping, eating, etc.) two weasels and 19 men.

One weasel was equipped with crevasse detectors to guide the party through a heavily crevassed area between miles 183 and 190 on Army-Navy Drive. It was left at mile 190 to be picked up and used on the return trip to Little America.

The train was making record-breaking time for the first 222 miles. Then it was stalled by a raging blizzard that lasted for days. The temperature and visibility were zero. Stinging, biting snow, driven by gale winds, swept across the bleak and barren Rockefeller plateau.

Since there was plenty of fuel and food on hand, there was nothing to do but wait for the storm to blow itself out. Some of the men slept in one of the 10 available bunks. Others studied correspondence courses, read or played cards in the messing wagon or in tractor cabs.

At mile 380, engine trouble forced one of the big D-8s out of the train. It was left to be repaired by a mechanic who would later be flown to the spot. It would be used again on the return trip. Loss of the D-8 meant throwing an extra load on the other tractors. They were run in second gear and the speed of the train was cut slightly.

During the entire trip, drivers worked in two 12-hour shifts. One

FIERY BUT FROZEN—Mt. Erebus, active volcano in land of ice, rises 13,500 feet over waters of McMurdo Sound as *USS Atka* heads for Hut Point base.

extra driver was on each shift to relieve for chow during the mid-shift.

The tractor train pulled into Byrd Station on 22 October. The camp looked beautiful to the crew. And tomorrow—Antarctic liberty!

Time to Retire

It's time to make preparations for leaving one of these stations when the ice starts to break up.

Around the end of February the Ross Sea ice began to break rapidly owing to southerly winds and tides.

When this happened, the men at McMurdo found that open water extended from the base of their camp, around Cape Armitage to within a few hundred yards of the 5000-foot ski runway at Scott Base, and to a point one-half mile beyond the cape.

The breakage continued despite freezing temperatures. Large cracks developed about the skiway. Two D-8 tractors hastily began construction of a safe parking area for an R4D *Skytrain* and a 1200-foot emergency Otter airstrip on fast ice over the volcanic beach behind the New Zealand Scott base.

Portable rubber fuel tanks were laid and an R4D shuttled 7000 gallons of fuel four miles from the cracking McMurdo ice runway to Scott Base. Whirlybirds moved fuel lines, radio gear and the last remaining materials to camp. The GCA tower, generators and two refuelers were sledged by tractor to Black Island.

UNDER COVER—Navyman digs out of hut for look see at winter night.

While this was going on, other preparations were taking place for the arrival of British explorer Sir Vivian Fuchs. Banners were readied and a nine-piece marching band, dubbed "McMurdo Philharmonic," was practicing.

Fuchs and his trans-Antarctic expedition reached Scott Base on 2 March at the end of a trek that lasted 99 days. He and his party became the first men ever to cross the Antarctic continent overland. NAF McMurdo declared a holiday for the occasion, one for the history books.

The festivities died down and departure continued. Navymen passed around a message which read:

"Ross Sea Ferry Boat Company has announced tentative schedule of last seasonal sailing of the diesel packet ship *Glacier* with stops at Little America, McMurdo and Hallet. Requested to be ready and waiting. Subject to acts of God and the restraint of princes and RADM Dufek, the management intends holding to schedule."

The Long Night

At precisely 1506 on 21 March, the ensign of the United States was lowered from atop a flagpole situated at the geographical South Pole. That was the exact time the sun went down—or rather, went below the theoretical horizon. Afterwards, taps was sounded on a "recorder," a musical instrument of the wooden flute variety.

A 16-knot northerly wind was blowing powdered snow. Traces of red and purple showed in the sky as the group stood at attention during the ceremony. The temperature was minus 52.5 degrees.

The flag will not be raised again until late this month. And, since the sun comes up and goes down but once a year, the men at the South Pole Station were able to say to their families back in the U. S., "We will be home tomorrow, in the morning."

Thomas Wholey, JOC, USN

LAND OF CONTRAST—Dim Antarctic sun shines on barrier ice in dark sea as icebreaker makes patrol cruise.

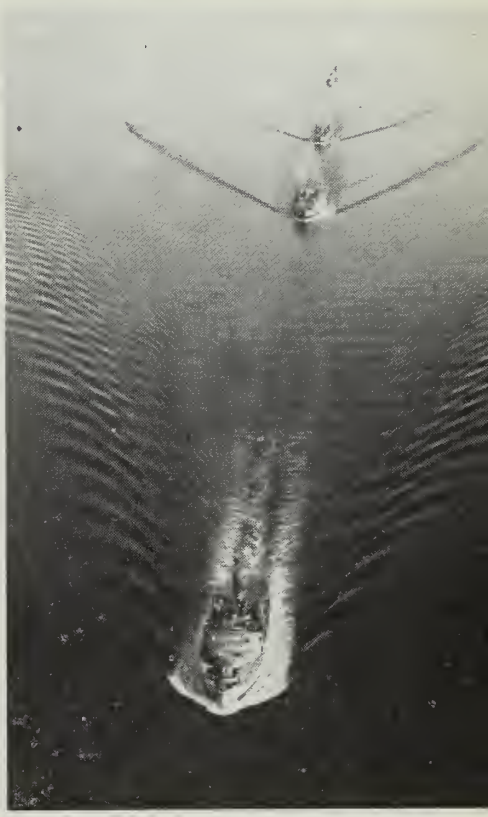
It's Cold Up North, Too

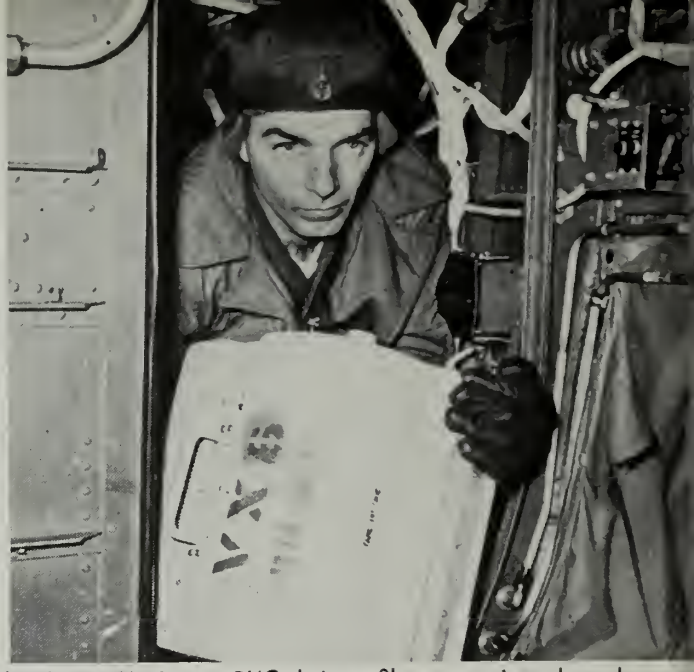
A LOT OF attention is being given to the spectacular accomplishments of the Navy at the North and South Poles. There's another group of sailors, including men of the Fleet, the Coast Guard and MSTS who have been battling the same foe.

These seafaring men have been sailing the ice-filled Arctic waters on the now "routine" yearly mission of taking supplies to far northern military bases such as Thule, Greenland. Navy's Military Sea Transport Service sailors are old hands at iceberg dodging as they have been making this resupply run yearly since 1950.

Ships in the 1958 voyage to the Arctic were: USS *Glacier* (AGB 4), USS *Edisto* (AGB 2), USS *Rushmore* (LSD 14), and USS *Casa Grande* (LSD 13), SS *John Sargent*, and Fleet Tug USS *Nipmuc* (ATF 157).

Here is a frosty group of photographs to give you an idea of the cool job these bluenose sailors performed. Our hats are off to the crews keeping the supplies moving.





IT'S A SNAP—W. R. Kemp, PH1, checks camera during flight. *Rt:* R. M. Jones, PHC, brings film magazine aboard.

Charting the Unexplored Antarctic

THE ENLISTED PHOTOGRAPHERS of Air Development Squadron Six who photo-mapped nearly 600,000 square miles of frozen Antarctic terrain are more than just photographers—they are airmen and technicians with a little explorer thrown in for good measure.

The six-man team of aerial photographers based at NAF McMurdo Sound used two different systems in carrying out their aerial mapping program. The first employs a lone camera mounted in a single-engined *Otter* which is used in exploration flights preliminary to the actual mapping mission in a larger plane.

The second system, known as a tri-metrigon setup, uses three cameras placed side by side in the nose of a twin-engined *Neptune* or in the belly of a four-motored *Skymaster.* These cameras see and record everything from horizon to horizon plus photographing the ground directly below.

There are three phases in each mapping operation. First an informal exploration run is made over the area to get a general idea of the terrain or coastline.

The information gathered on these flights is applied to existing charts and flight lines are roughly plotted so the pilot may steer a proper course over the desired area. Then comes the next phase which is known as reconnaissance.

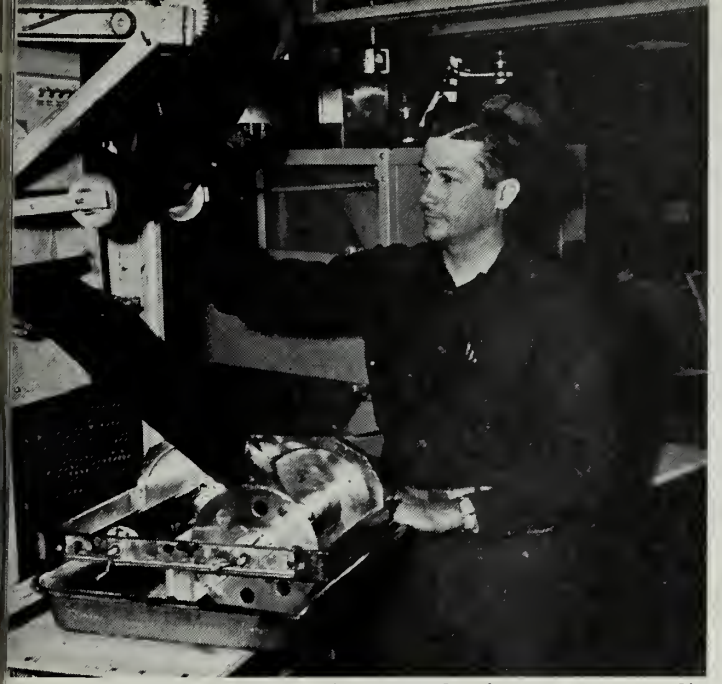
This time the photographer uses his "tri-met" system. Back in the photo lab he develops the negatives and makes prints from which newly discovered features of the land or ice cap topography are applied to his existing map. The new discoveries are then forwarded to the U. S. Navy Hydrographic Office, Washington, D. C.

The Hydrographic Office sets up specific flight lines over the areas to be mapped in detail. Then the photo team goes back to work on the last phase of the operation which is simply called "mapping." This requires close coordination between pilot, navigator and photographer.

The navigator keeps a close check on ground speed and course and informs the pilot and photographer whenever there is a change. Photo mapping missions are flown at an altitude of 15,000 feet and the photographer must keep a watchful eye on the electronic altitude computer, adjusting his cameras for any variation.

After each flight the cameras are removed from the plane and checked for proper working order. This in

COOL PHOTOGRAPHY—The mysterious land of Antarctica, is being recorded by enlisted Navy aerial photographers of Air Development Squadron Six.



ROLL ON—P. B. Dickson, PHC, dries negs. *Rt:* Chief Photographer W. C. Ahlin, points flight lines to pilot.

itself is no small job, for each camera weighs 84 pounds and their magazines—which hold 440 exposures—make them bulky and hard to handle.

Photo-mapping is one of the most important tasks assigned to Air Development Squadron Six which has been a support unit of Operation Deep Freeze since the polar expedition began in 1955.

"Of course, ground survey would be the most ideal way of mapping the continent, but that's impossible," says Chief Warrant Officer Walter C. Ahlin, USN, head man of the Antarctic photo-mapping team. "The only feasible way and the next most accurate is photo-mapping."

The information gained from this work is used by the Hydrographic Office in preparing charts and detailed maps of this largely unexplored land of ice. It is also a great aid to the International Geophysical Year projects now being carried on at the bottom of the earth.

Ordinarily the nine-by-nine inch prints are forwarded direct to Washington but the photographers are sometimes called on to make their own "mosaic" maps. One such map was recently made of the Marble Point area where the Navy is surveying an ice-free section of coastline as a possible site for a permanent Antarctic airfield.

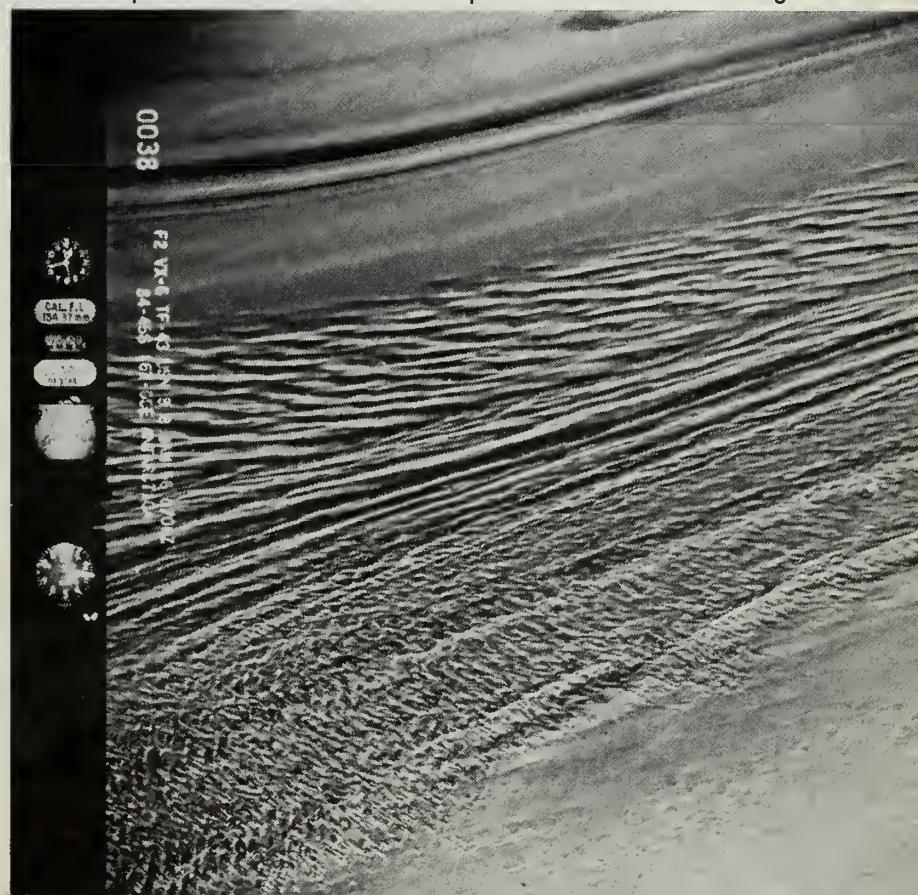
The mosaic is made by cutting up the prints into small irregular segments and then pasting them together with a gum rubber solution on a sheet of plywood. The completed map is then photographed and additional copies are made.

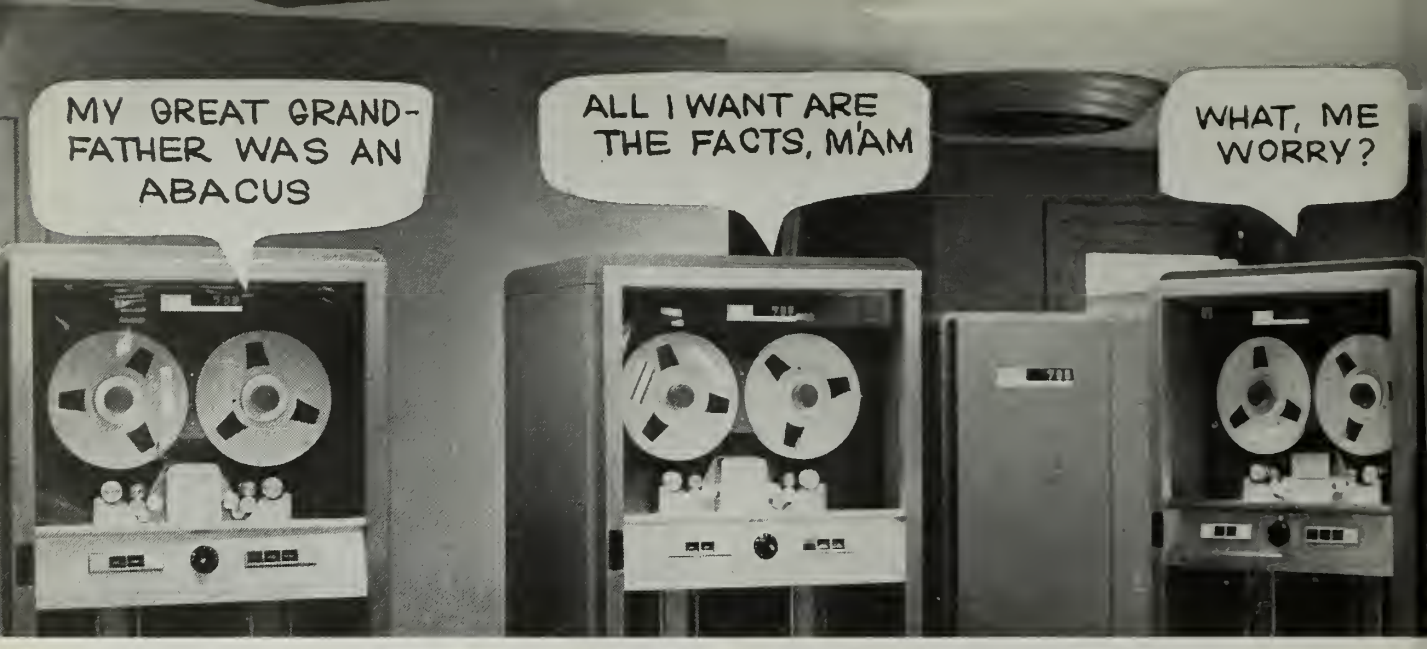
While aerial mapping and the activities associated with it take up a major portion of the men's schedule, they still find time to cover newsworthy events around the Navy's Antarctic base with their press cameras. They are responsible for many of the pictures you see in newspapers and magazines throughout the world featuring Navy's polar adventures.

In contrast to the climate at Antarctica is that at Pensacola, Fla., where most Navy photographers are trained. The men at McMurdo, however, have gained much of their aerial mapping experience while operating with VAR-62 out of Norfolk, Va., on photo flights.

—Marshall J. Schuon, JO3, USN.

ON ICE—Nine-by-nine prints similar to one below are fitted together to make mosaic maps. Aerial camera records exposure data at side of negative.





Meet the Machine with a

HELLO.

WELCOME TO THE MANPOWER INFORMATION DIVISION.

I AM THE 705 DATA PROCESSING MACHINE.

I CAN WORK RAPIDLY AND ACCURATELY.

AS A DEMONSTRATION OF MY SPEED, I AM NOW GOING TO MULTIPLY 31684327591 BY 84365239428.

THE ANSWER IS 267305588332990-1457948.

THAT WAS FAST, WASN'T IT.

I AM NOW GOING TO STOP TYPING FOR MORE COMPUTING. *(There was a 1 second pause.)*

SINCE I LAST STOPPED TYPING, I HAVE MULTIPLIED TWO TIMES TWO, ONE THOUSAND TIMES.

EACH STEP I TAKE REQUIRES 17 MILLIONTHS OF A SECOND. IF YOU COULD TAKE A STEP FOR EACH ONE OF MINE, YOU COULD WALK AROUND THE WORLD IN LESS THAN 19 MINUTES.

I ALSO PLAY GAMES.

WATCH MEMORY ADDRESS COUNTER II IN UPPER RIGHT HAND CORNER OF THE CONSOLE.

WHEN YOU WERE BORN THE CALENDAR LOOKED LIKE THIS.

1933

AUGUST

SUN	MON	TUE	WED	THU	FRI	SAT
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

YOUR DATE OF BIRTH WAS 10 AUG 1933.

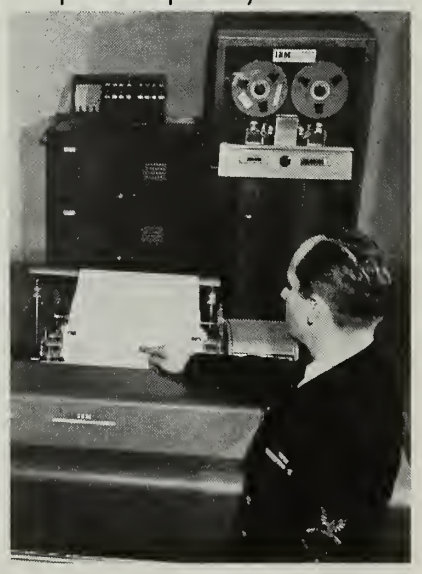
AS OF TODAY, 20 AUG 1958, YOUR AGE IS 25 YEARS, 10 DAYS.

YOU WERE BORN ON A THURSDAY. YOUR BIRTHDAY FELL ON THURSDAY AGAIN IN 1939, 1944 AND 1950.

YOU ENLISTED IN THE NAVY ON 10 SEP 1951. IF YOU REMAIN ON CONTINUOUS ACTIVE DUTY YOU WILL NORMALLY BE ABLE TO TRANSFER TO THE FLEET RESERVE ON 20 MAR 1971 AT THE AGE OF 37 YEARS, 7 MONTHS AND 10 DAYS.

THIS IS A SAMPLE of the sort of thing the Bureau of Naval Personnel's new 705 electronic data-processing machine (EDPM) can whip off at a typing speed of 250 words per minute and "figure in its head" at a rate much, much faster than that.

COMPUTATIONS made by the 705 data processing machine are turned into printed reports by this machine.



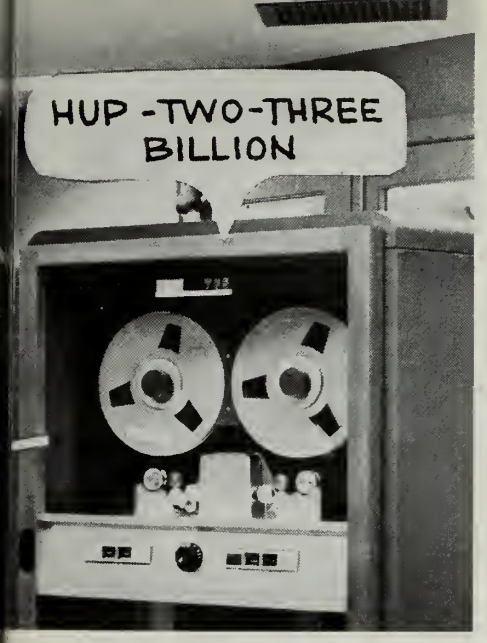
If the machine's masters—the Navymen and civilians who push the buttons and tell the machine what to do—had time for such things, they could also teach the 705 to play chess, hum a tune or map the orbits of space satellites (as 705's scientific sister, the 704 EDPM does).

However, the Bureau doesn't use this costly and amazingly complex machine to play games or make music. Nor is the Bureau in the satellite-tracking business.

Its business is you and your career. And now, thanks to the 705 and its ability to handle almost countless facts and figures at lightning speeds, the Navy will be able to give more personal attention to you, your potential, your career problems and your duty preferences.

How?—because data processing with electronic machines will help keep track of more information about you, make personnel records more accurate and up-to-date and give distribution officers and others more facts on the matter and more time to consider those facts before making a decision which might affect you.

At the same time the 705, and the new Naval Manpower Information System (NMIS) built around it, will benefit the Navy by helping it to calculate the future results of present-day personnel policies, providing for more efficient utilization of your skills and abilities, making for improved control over military pay and allowances and permitting more ef-



Memory

fective preparation for mobilization or catastrophe.

LOCATED IN THE new Data Processing Center, the 705 installation is made up of a number of machines working together, but the heart of the system is the 705 central processing unit and its magnetic core memory.

Composed of row after row and layer after layer of tiny "doughnuts" of ferromagnetic material, the memory can store for an indefinite time 40,000 bits of information in the form of letters of the alphabet, numbers, punctuation marks or symbols. These are "sensed" by the machine through a code based on variations in the arrangement of positively and negatively magnetized doughnuts.

An accumulator and 15 auxiliary units provide additional core storage for the intermediate results of arithmetic and logical processing. To increase the permanent storage capacity of the memory, magnetic drums, capable of holding 60,000 characters apiece, can be added to the system.

The 705 can "recall" data from its core memory at the rate of 58,800 characters per second.

The memory unit is used for the storage of data and programs (sets of instructions) which tell the machine system just what steps to take to carry out a particular assignment —whether it's listing the names of all the men in the Navy who speak Chinese or calculating the number of ETCs who will still be on active duty five years from now.

'DRIVER'S SEAT'—A. L. Szymanski, MAC, sits at the 705's console monitoring a data processing run. Sailor in back checks on one of the magnetic tape units.

The programs, defining in complete detail exactly what the machine system is to do under every conceivable combination of circumstances, are translated into "machine language" and fed into memory via either punched cards or magnetic tape. If any instruction is omitted, the system is helpless when it comes to that part of the problem.

THE 705's SPEED is something tremendous. For example, it can add five-digit figures together or subtract them from one another at a rate of 8400 additions or subtractions per second.

It can multiply five digits by five digits, 1250 times in a single second.

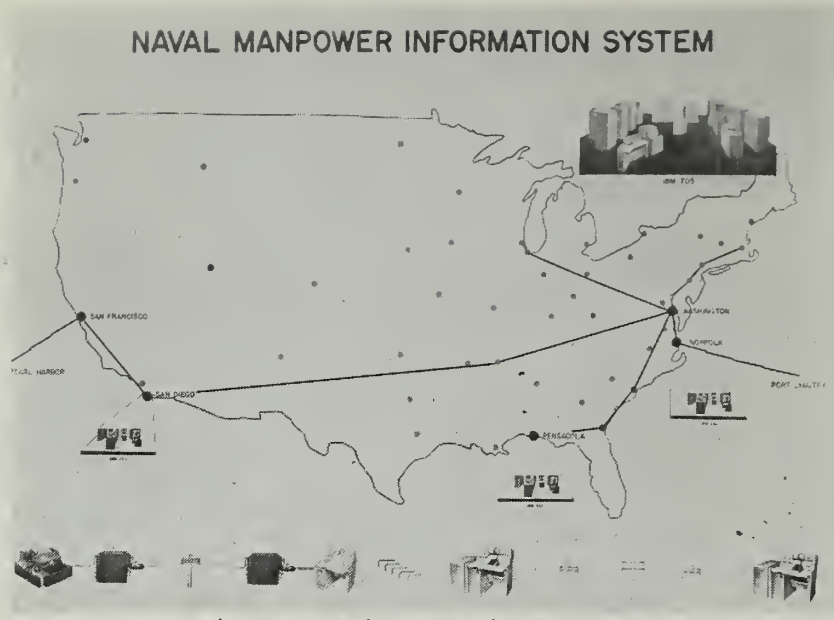
And, it's also a whiz at long division, taking only one-550th of a second to divide a six-digit figure by a four-digit one!

The system can read from or write on magnetic tape at a speed of 15,000 characters per second. At that pace, it could go through "Gone With the Wind" in about four and a half minutes if it were so programmed.

In such operations as compiling personnel statistics or looking for men with a particular skill, the Bureau's 705 system could work from either punched cards or magnetic tape, but it can handle tape much faster than it does cards.

With tape, the information filed in 60,000 punched cards—well over five million characters—can be stored on a single reel only seven-and-one-half inches in diameter. This means that an officer punched-card record, containing 945 characters of information and taking 12 cards, can be transferred to less than four and three-quarters inches of tape. The 705 system can read that amount of tape in less than one-fifteenth of a second, using punched cards, would take almost three seconds—nearly 45 times as long.

To take advantage of the savings tape will mean, the Bureau is now transferring its punched-card personnel records to tape for both officers and enlisted men. When the job is done, complete records of every member of the Navy will be contained on just 36 reels of tape.



FAR REACHING—There is more than meets the eye at BuPers Data Processing Center. Chart shows data processing system that will be in operation in 1959.

THE EXTERNAL CONTROLS of the Data Processing Center's 705 system are located in a compact console, studded with flashing lights and pushbuttons, which are used to "get things started." Then, the 705 central processing unit, following its memorized instructions, practically runs the machine system by itself until the job is finished.

The reading phase of a typical operation is done by machines called *magnetic tape units,* which relay the raw material of facts and figures to the 705 for processing. The results appear at another machine, the *tape data selector,* which prints up final reports, statistics and such on either cards or printed listings.

How these machines and the others in the 705 system accomplish all this is complicated enough to leave the layman awe-struck, but there's really no need for fear.

Despite its complexity and usefulness, the EDPM system has no ability to "think for itself." People must tell it how to handle information in a specific and logical way before it can produce meaningful answers.

NEXT QUESTION—Chief Machine Accountant O. E. Luckey, USN, discusses a machine program for new run in BuPers Manpower Information Division.

IN THE OLD "everybody knew everybody else" days before World War II, there wasn't much need for anything so complex as the 705 to keep track of the Navy's personnel. And, since the Navy was so small, assignments, transfers and the like had almost a personal touch.

As the size of the Navy grew during the war, a lot of that personal touch was lost. The Navy did what it could to get the right man in the right billet at the right time through the adoption of punched card accounting methods. However, because the information that can be put on a punched card is limited to 80 characters, this didn't leave very much room for consideration of individual desires, skills and backgrounds in the handling of personnel matters.

In the large post-war Navy this continued to be a problem. Although the situation was alleviated to some extent by using more cards for each individual, there were still limitations on the number of cards that could be handled efficiently.

The answer was electronic data processing. The Navy must maintain accurate, current and readily accessible data on 10,000 naval activities, several million peacetime and mobilization billets, 640,000 active duty personnel, 650,000 Reserve personnel and an annual expenditure of $2,500,000,000.

The Bureau has been getting ready for EDPM since 1955, when the Secretary of the Navy directed Navy-wide action to explore and develop the possibilities presented by this modern means of processing information. That same year the Bureau of Naval Personnel established an Electronic Data Processing Advisory Panel and a Machine Systems Analysis Division. An over-all plan for the Naval Manpower Information System was approved by the Chief of Naval Personnel in June 1956, and the experts have been working out details of the plan ever since. In April of this year, with the installation of the 705 in the Data Processing Center and the establishment of the Manpower Information Division, the new system entered the operational phase.

EARLY NEXT year the division will have: compiled individual magnetic tape records for every man on active duty; begun using EDPM to

work out allowances, complements, manpower requirements and allocation plans for all Naval activities; and started the electronic processing of distribution data for all aviation officers.

In 1959 three electronic data processing installations in the field, using smaller-scale versions of the 705, will swing into full operation.

Located at *San Diego, Calif.*, for the Pacific Fleet; *Norfolk, Va.*, for the Atlantic Fleet; and *Pensacola, Fla.*, for continental shore activities, these installations will have the job of feeding necessary personnel information to the Fleets and shore commands and supplying the BuPers Data Processing Center with change information which will enable the Bureau to keep its files up to date.

Two other important elements of the new Manpower Information System are the *Personnel Accounting Machine Installations* (PAMIs), located at District Headquarters of all continental Naval Districts and the Naval Air Reserve Training Command, and the NMIS *Data Transceiver Network*. The chief function of the PAMIs will be to process data on Reserve personnel and to keep the Chief of Naval Personnel supplied with strength and change information. The transceiver network links the Data Processing Center with the field installations for the transmission of high-priority personnel information. It consists of telephone lines connected to devices which are able to transmit and receive information in punched card form.

The new system is all part of the transition to an electronic, nucleonic, supersonic Navy, for that transition has created an ever-increasing need for trained, skilled personnel.

Besides helping the Navy to put the right man in the right job at the right time, the system will also help to keep track of 650,000 men and women, forecast training requirements and perform a myriad of other detailed, clerical and accounting functions.

By providing an easily accessible, up-to-date record of every Navyman, the system emphasizes the continued importance of the personal touch, in dealing with the individual, ashore or afloat.

Although much of the work of the Manpower Information System will be done by machines, there is no need to get the idea you'll become just so much fodder for a monster that feeds on magnetic tape. Human beings — not machines — will still make the decisions on matters which might affect you.

The machines are just being used to help the humans get a better idea of the factors that make you an individual. —Jerry Wolff.

USS 705 Is Commissioned, But Minus That Bottle of Champagne

The Bureau Data Processing Center, home of the 705 EDPM and heart of the new Navy Manpower Information System, officially opened for business on 16 Jul 1958. Among the guests on hand for the ceremonies was William B. Franke, Under Secretary of the Navy.

VADM H. P. Smith, USN, Chief of Naval Personnel, gave a brief talk marking the occasion. Here, in part, is what Admiral Smith said of the significance of the event:

"This is a commissioning ceremony.

"But it is a new kind of commissioning which epitomizes the new kind of Navy which is evolving as a result of scientific advancements and technological progress in the presence of the atomic age and the dawn of the space age.

We believe the Navy Manpower Information System marks a milestone in the Navy's progress in the field of personnel administration. We will begin to harvest benefits from this installation at the end of this calendar year.

"The electronic computer, which is the heart of this system, is only a tool—nothing more. No machine has, or ever will, make a decision concerning a Navyman.

"This machine installation is designed to help men make better decisions because more complete, accurate and accessible information concerning the individual's qualifications and duty preferences will be available. As a result of this better information which is now available to the officers who are responsible for the assignment and distribution of naval personnel, we are able to achieve the closest thing possible to a personal interview in the absence of the actual presence of the individual."

After the ceremony Admiral Smith pushed a button at the 705's console to start the machine system on a typical operation—updating the officer master tape record. The job was done in a matter of minutes. Simultaneously, the machine setup was also transferring enlisted records from cards to magnetic tape.

OPENING PUNCH—VADM H. P. Smith, USN, pushes button to start data processing machines on typical job. CAPT Carlyle Ingram sits at right.

experience. Two of these cruises will be to such choice liberty areas as Europe or South America. The third usually takes the midshipmen to Little Creek, Va., and Corpus Christi, Tex., for amphibious and aviation indoctrination.

When they graduate, commissions as ensigns in the Regular Navy or as second lieutenants in the Regular Marine Corps will be waiting for them.

Sounds like a good deal—and it is—but it's not all beer and skittles. Although the midshipman who enters the program from active duty enlisted status retains his enlisted rate on a suspended basis (in case he's separated from the program), he draws only his retainer pay of $50 a month, or the increased pay he gets during summer cruises.

This is definitely not enough to make him the richest man on campus. In fact, experience has proven that he will probably need an additional

Sea to Campus, Campus to Sea

RIGHT ABOUT NOW, at such well known schools as Cornell, Notre Dame and the University of California, a picked crop of young enlisted men, who were on active duty with the Navy and Marine Corps only a few short months ago, are getting used to the idea of being college freshmen.

On campus, as they scurry from building to building signing up for classes or wait in line at the student book store, these youths don't look much different from their fellow students. Chances are, they're wearing the same style clothes and the same bewildered look that the rest of the freshmen are.

However, there is an important difference between these young men and the rest of the "frosh," for these particular freshmen, scattered around at 52 NROTC colleges and universities throughout the country, are being trained and educated for careers as Navy or Marine Corps officers, through the Regular Naval Reserve Officers' Training Program.

While they're in the school of their choice, studying for baccalaureates in fields they've selected for themselves, the Navy will provide them:

- All tuition, books and fees.
- Retainer pay of $50 a month for four years.
- The required uniforms for wear at drills, on cruises, and at other functions for which uniforms may be prescribed.
- Three eight-week-long summer cruises, during which they will receive practical training and first hand

$300 to $600 per year—depending on the school and the student—to meet all expenses. Unless his folks can help him out, or he can save up some cash beforehand, digging up that much money can be quite a problem especially when the student is so busy with his studies that it would be almost impossible for him to take a part-time job.

"That's no problem for me," you might be figuring to yourself, "I'm all set to get married and I know my wife wouldn't mind working long enough for me to get through school."

This isn't the solution either. In order to get into the program you must be single, and agree to stay that way until you're commissioned.

Largely because of the problem

ON CAMPUS, NROTC students have a broad choice of majors. Naval subjects are included in study program.

of finances, the Navy is not getting as many active duty applicants for Regular NROTC as it would like to have, so the odds in favor of being nominated for the program are better than you might think.

The program is open to Regular and Reserve enlisted men on active duty and to inactive Reservists and civilians. Each year some 1800 candidates are selected for it. Of that number, 180 candidates are Navymen or Marines who've applied while on active duty.

The annual deadline on applications for the upcoming program is usually some time in October. For instance, if you want to get in on the program next year, the nomination from your CO must be in the Bureau of Naval Personnel by 16 Oct 1958. Then, if you are considered qualified, your skipper will receive a copy of the Navy College Aptitude Test, which you'll take on the Fleet-wide test date of 13 Dec.

via NROTC

This test and your physical examination are the controlling factors which determine whether or not your application will be given further consideration.

The names of those who pass the College aptitude test will be published in March 1959, and next summer, if you're still interested in the program, you'll be ordered to the Naval Preparatory School at Bainbridge, Md., where you'll get a chance to brush up on your studies. After that (providing, of course, that you get through the Preparatory School successfully) you'll be appointed midshipman in the Reserve and sent to one of 52 NROTC Units.

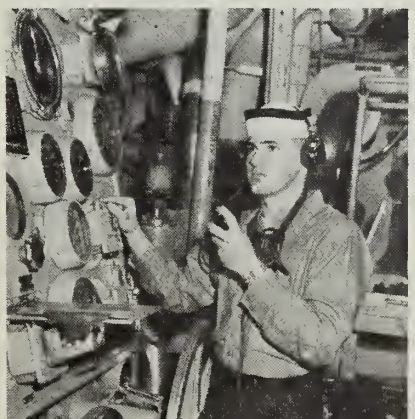
While in college you may take *any course* leading to a bachelor's degree EXCEPT the following:

ON DECK—During eight-week midshipman cruises Navy college students get the word firsthand on what they will have to do as future officers.

Pre-Medicine, Pre-Dental, General Agriculture, Dairy Production, Soils, Wildlife Management, Soil Conservation, Hotel Administration, Anthropology, Pre-Veterinary, Pre-Theological, Agronomy, Dairy Manufacturing, Horticulture, Real Estate, Religion, Landscape Architecture, Physical Education, Pharmacy, Music, Art, Law, Poultry Husbandry, Dairy Husbandry, Floriculture, Animal Science, Entomology, Dramatics, Industrial Arts, or Animal Husbandry. Except for these courses the field is wide open to you.

Naturally, there are some courses you'll be required to take. You must have 24 semester hours, or the equivalent in quarter hours, of naval science. You'll also need to complete one year of college mathematics and one year of college physics by the end of your sophomore year. And, you'll be required to achieve proficiency in written and oral English, meeting the standards established by the college you attend. Outside of these few restrictions and requirements, you'll be practically on your own for the four years of schooling.

BACK TO SEA—In summer, midshipmen learn while taking cruises to foreign ports in Europe or South America.



ON TARGET—NROTC students from University of Colorado learn about gunnery on *USS Stephen Potter* (DD 538). *Below:* Midshipmen report for cruise.

NOT ALL WORK—Although midshipmen, like most college students, must spend a lot of time studying, there is still time for fun such as dancing.

Upon graduation you'll be commissioned and ordered to active duty for four years. Depending on the needs of the service at the time, your commission will be as an ensign (Line) in the Navy, a second lieutenant in the Marine Corps or an ensign in one of the Navy's staff corps. Naturally, you'll be given a chance to indicate which branch you'd prefer.

Most of the graduates take Line commissions in the Navy. If you apply, and are qualified, you may receive immediate assignment to flight training.

Once you are commissioned you'll be considered a career officer in every sense of the word, since the Regular NROTC program is designed as a supplement to the Navy Academy's output. However, during your third year of commissioned service you must indicate whether or not you want to continue your career as a Regular officer. All those who apply will be screened, and those who are selected, within the authorized strength established at the time, will continue their careers in the Regular Navy or Marine Corps. The probability of continued career service is excellent for those who request it, providing their past performance and potential for the future is at an acceptable level.

Those who do not apply, or who are not selected for retention, will be re-appointed as Reserve officers. They will be retained on active duty for an additional year to complete four years of active duty unless sooner released by the Secretary of the Navy, at which time they may be ordered to inactive duty to fulfill the remainder of their original six-year obligations.

Sound worth looking into? The eligibility requirements can be found in Articles C-1202 and C-1204 of *BuPers Manual.* Briefly, here's what it takes:

- You must be on an enlistment or extension of an enlistment which will not expire before 1 September of the year in which you will enter college.
- You must have reached your 17th—but not your 21st—birthday on 1 July of the year in which you wish to enter the program. However, for men on active duty, the upper age limit will be waived if you have previous college credits, and if you will not have reached your 25th birthday by 1 July of the year in

which you graduate from college. To establish this waiver, you will have to submit a college transcript.

- You must be a high school graduate or possess the equivalent educational background or high school certificate which would be acceptable for admission to an NROTC college or university.
- You must be a male citizen of the United States.
- You must be unmarried and agree to remain unmarried until commissioned.
- You must be of good moral character, have the potential for leadership and be recommended by your commanding officer.
- You must pass a physical examination conducted by two medical officers. (The final determination of your physical qualifications is subject to review and decision by the Chief, Bureau of Medicine and Surgery, and to the approval of the Chief of Naval Personnel. No waivers of physical defects will be granted.)

Enlisted men (except those enrolled in the Naval Preparatory School), who are on active duty undergoing instruction in an officer candidate program, such as the one for Naval Aviation Cadets, are not eligible to apply for NROTC while retaining their officer candidate status.

For those who don't have high school diplomas a passing grade on the USAFI General Educational Development Test battery, high-school level, with a minium standard score of 45 on the five GED tests, or no score below 35 on any one of the five tests will be considered the full equivalent of high school graduation.

The age of the applicant for the program is a very important factor. If you will have reached your 21st birthday by 1 July of the year in which you'd enter the program, you will definitely *not* be eligible to apply unless you have previous college experience. For each year over 21, you must be able to establish one year of acceptable college credit. In general, 30 semester hours (or 45 quarter hours) are necessary for each year. GED college-level tests are generally acceptable for one year of advanced standing, providing they include additional tests covering college-level algebra or geometry.

Procedures for nominating qualified active duty enlisted men to participate in the Navy College Aptitude Test are covered in BuPers Inst. 1111.4B. Although much of that instruction deals with administrative matters, it still contains considerable information of direct interest to the prospective applicant.

FUTURE NAVAL OFFICERS get practice in antisubmarine warfare in mock-up of combat information center. Such studies will be put to use on cruise.

The Chief of Naval Personnel began receiving nominations for the 1959 program on 1 Aug 1958. However, the deadline on getting nominations into the Bureau isn't until 16 Oct 58, so there is time to apply.

If, for some reason, you've missed the official word on the program, see your personnel officer about it. He'll be glad to give you a helping hand—because the Navy is eager to get all the qualified applicants it can.

—Jerry Wolff.

LAST CRUISE takes midshipmen to Little Creek, Va., and Corpus Christi, Tex., for amphib and aviation training. Here NROTC men and Marines hit the beach.

LETTERS TO THE EDITOR

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D. C.

Suggestions on Uniform Changes

SIR: Here are a couple of my "crackbrain" ideas that your readers may be interested in discussing:

With the Army branching out in greens to replace the old khaki, and the Air Force now wearing blues, isn't it time to consider the plight of the CPOs, WOs and the commissioned officers in regard to the dress blue "A" and "B" uniform?

Why not modify it to a single-breasted uniform patterned after the khakis? The Navy is the only branch, with the exception of the Coast Guard, that wears a double-breasted coat as part of our dress uniform.

I've worn the CPO uniform for more than 12 years now and I must say there have been many, many times when I had wished it was single-breasted. For the sake of coolness, if for nothing else. That fold of cloth across the middle can really build up the BTUs on a warm day.

Now that I have attempted to get the double-fold off my chest, brace yourself for the second salvo. Has the Navy ever considered doing away with the hashmark in its present shape and size and using one about two inches long instead. Also, why not let warrants and commissioned officers wear similar marks to show their respective time in service? And let's have the hashmark sewn on the sleeve in a horizontal manner rather than at an angle.—R. T. S., BMC, USN.

• *Your idea about a single-breasted coat is not new to the Navy's uniform experts. It has been proposed before but has received very little support. The double-breasted blue service coat with gold buttons is traditional in practically every country that has a Navy. Although it is true that we should not be hidebound by tradition, it is also true that we should steer clear of change and counter-change without considerable justification. In addition to several other factors, the Navy feels that popular approval is very important in considering uniform changes.*

Incidentally, your comments on hashmarks are the first along these lines that have been received. What's the reaction in the Fleet?—ED.

Path of Advancement to WO

SIR: Unofficially, I heard that a new path of advancement to Warrant Officer has been established for Radarmen.

Since the ship's office has not as yet received any instructions pertaining to this reported change, can you give me the scoop?—J. F. H., RDC, USN.

• *BuPers Notice 1120 of 5 Mar 1958 announced that the primary path of advancement for Radarman, Sonarman, Signalman and Radioman is to Operations Technician (714) for Warrant Officers, and Deck (170) for LDO.*

Electronics Technician (766) and Electrician (175) are now included in the alternate path of advancement for RD, SO and RM to warrant grades and limited duty officer categories.

"The Manual of Qualifications for Advancement in Rating" (NavPers 18068) has been amended to include these changes.—ED.

Computing Sea Duty

SIR: In May 1955 after serving 18 months of what I thought was a "normal tour of shore duty," I was transferred to the Service Craft Port Control Office at Norfolk, Va. For the next 14 months I served in several types of small craft such as YOGs and YTBs. Then I was ordered to sea on board a destroyer.

Since I departed from Service Craft (in Aug '56) that duty has been redesignated as "preferred sea duty." If such is the case, does my sea duty count since May '55 when I first reported to Service Control or when I reported to this "greyhound" in August '56?—A. C., EM1, USN.

• *During the period you served in Service Craft, Naval Control Office at Norfolk, the duty was classified as Fleet shore duty. Since 19 Jun 1957, however, duty at that activity has been classified as sea duty for rotation and promotion purposes. The Bureau considers it impracticable and administrative unfeasible to credit personnel with sea duty who were not serving in that activity on or since the date such duty was reclassified as sea duty.*

Therefore, in your case, your sea tour commenced in August 1956 when you reported to USS *Compton* (DD 705). *In those cases where commands are unable to compute sea tour commencement dates, official requests for verification or computation of such dates should be submitted to the Chief of Naval Personnel in accordance with the provisions of enclosure (1) to BuPers Inst. 1306.62A.*—ED.

Requirements for NROTC

SIR: Are waivers granted for applicants to the NROTC program who are high school gradutes but have not yet reached their 17th birthday? Here is my reason for asking.

My son is due to graduate from high school in June 1960 but will not be 17 until October of that year and so is ineligible to apply for the NROTC until the following year. According to local information, waivers are not granted. This would seem to be a handicap to brighter students who finish high school early.—P. D. M., CDR, USN.

• *Regulations for administration of the Regular NROTC stipulate that candidates must have reached the 17th anniversary of birth by 1 July of the year in which enrolled. The Regular NROTC program regulations require high and rigid standards. Therefore, no waivers for any requirement can be granted.*

Commanding Officers of NROTC Units are authorized to enroll in the Contract NROTC program applicants who are 16 years of age or recently 17 provided they are considered to be of sufficient maturity to pursue Naval Science courses. While in the Contract program they may enter the competitive procedure for enrollment in the Regular program.—ED.

Question on LDO

SIR: I am a W-1 interested in an LDO commission. Before I try for this program, however, I would like some information regarding LDO retirement and official action taken if I am selected and later twice passed over for promotion.—DGW, WO, USN.

• *A permanent LDO must have at least 10 years' commissioned service before retirement. A temporary LDO on the other hand, can revert and transfer to the Fleet Reserve after 20 years' active service. So far as being twice passed over for promotion, official action would provide that you be reverted to the warrant grade you would have held if you hadn't accepted an LDO commission. Did you see the article on LDOs in last month's issue of* ALL HANDS *(pages 16 and 17)?*—ED.

Starting Off Right

SIR: We invite any Fleet tug to match our record for the ocean tows. During five and one-half months (from 6 Feb 1958 to 24 Jul 1958) this red hot Fleet tug, in service only since January of this year, has towed 105 times its own weight for a distance of more than halfway around the world. This represents 137,768 tons of shipping towed 11,967 miles. These tows included eight assorted CVs, four DDs, nine DEs, one APA, one YR and one YTL. We may be prejudiced, but we think our ship USS *Yuma* (ATF 94), has what it takes.—C. J. P., EN1, USN.

• *Sounds as though you've been busy pulling and tugging. There's little doubt that Fleet tugs justify their reputation as workhorses. However, we suspect that some of the old-timers are going to take pen in hand at your claims. Remember, you're less than a year old and some of these boys have been around for a long time. We refer you, for example, to the claims of* USS *Salish (ATA 187) to be found on page 24.*—ED.

Use of Stenographic Machine

SIR: I have a question regarding shorthand qualifications for YN1 and YNC. The *Manual of Qualifications for Advancement in Rating* states: "Shorthand Method—A machine for the purpose of taking stenographic notes is acceptable when provided by the yeoman."

Does the phrase "provided by yeoman" mean that the YN must own his own machine, or does it simply mean that an available Navy-owned machine would be acceptable?—R. D. D., YNC, USN.

• *"Provided by yeoman" in this case means provided by yeoman. If one is available, he can use a Navy-owned one, or a yeoman can own his own stenographic machine. In any case, the yeoman himself is responsible for providing a machine if he wishes to qualify for advancement by this method.*—ED.

Reserve Clothing Allowance

SIR: While reviewing some back issues of ALL HANDS I came across a letter to the editor concerning clothing allowances for Naval Reservists (P. 46, Dec '57 issue). I believe you're out in left field in regard to the answer you gave to G. E. J., SKC, USN.

When a Reservist is issued clothing, the clothing remains government property and must be turned back in upon discharge from the Naval Reserve. So, if he enlists in the Regular Navy, he should be entitled to the full authorized sea bag.

If a Reservist goes on active duty, he is then issued the remainder of the authorized sea bag or a monetary allowance instead. At least that's what they did during the Korean conflict.

I haven't seen the manual or instruction you quote but I am basing this on actual experience. Realizing that ALL HANDS strives to be as accurate as possible, I think you should double check. —R. E., SMC, USNR.

• *We double checked, and just for you, we triple checked.*

According to current regulations an inactive Reservist who has not reported for active duty and is discharged on or after 1 Jul 1957 for immediate enlistment in the Regular Navy is permitted to retain items of clothing which have been issued to him as a Reservist.

Assuming that G. E. J., SKC, USN, *was an inactive Reservist who was discharged on or after 1 Jul 1957 for immediate enlistment in the Regular Navy, the information published in the December 1957 issue of* ALL HANDS *is correct.* —ED.

Authority for Advancement

SIR: Two questions have come up, discussion of which has turned friend against friend in our personnel department. (1) Are NavPers 624s checked in the Bureau against a man's service jacket for correctness after the Examining Center enters your exam mark if you passed the test? Our personnel department is divided as to whether or not the Bureau checks 624s. Some say the Bureau does make a check for all rates; others say that it is only for E-7, and still others seem to think they aren't checked by the Bureau at all. They say that this is a command responsibility.

(2) Since I have been under the impression that the Chief of Naval Personnel is the authority for all advancements, I was wondering why the Examining Center publishes the advancement in rate list for rates E-4 through E-6, and the Bureau for E-7.—J. F. D., DT1, USN.

• *Someone in your personnel department is right on the ball. NavPers 624 forms (Report on Examination for Advancement or Change in Rate or Rating) are checked for correctness by the Bureau of Naval Personnel, but only for advancement to E-7.*

You are quite right in assuming that the Bureau is the authority for advancement of all rates. However, for all except advancement to E-7, authority is delegated to the Commanding Officer of the Naval Examining Center.—ED.

ON HIGH—Navy blimp comes in over aircraft carrier to pass the word during antisubmarine warfare exercise.

SMALL BUT POWERFUL, ocean-going tug, *USS Abnaki* (ATF 96) is moored in her home port at Pearl Harbor.

Chest Out, Chin In

SIR: After getting my teeth kicked out about portholes on submarines (ALL HANDS, August 1957, page 19, and subsequent issues), I'm a little leery about sticking my chin out again. But here goes.

In the June issue of ALL HANDS the caption to the cover picture says: "Here, Captain O. D. Waters, Commander Destroyer Squadron Two, presents Marvin Sizemore, BMC, with his fifth Good Conduct medal."

All good yeoman and personnel men know that the fifth award of the Good Conduct medal is nothing more than a service record entry and a star for the Good Conduct ribbon. What gives? —C. E. K., YNC, USN.

• *You and all the other good yeoman and personnel men are right. It's our mistake so here are your teeth back. Our bark is worse than our bite.*—ED.

Uniform Allowance in USNR

SIR: During fiscal year 1937 I was appointed permanent warrant officer. I was attached to an inactive Naval Reserve aviation squadron as a CPO at the time of appointment, and I am now filling an officer billet with the same squadron.

Am I entitled to a uniform allowance? I have not collected one, and no one at this station has been able to find an instruction pertaining to my case. Would you please advise me regarding my eligibility for this allowance and procedure for collecting one if it is due me.—G. H. B., W-1, USNR.

• *You are entitled to an initial uniform allowance only upon reporting for active duty in excess of 90 days, after completing 14 days' active duty or active duty for training, or after having attended 14 authorized drills as an officer in the Ready Reserve.*

After qualifying under one of these conditions, submit your claim (in duplicate) on NavPers Form 3095 to the Officer in Charge, Reserve Officers Recording Activity, 30th and Fort Streets, Omaha, Neb., via your commanding officer. If the claim is based on active duty or active duty for training of 14 days or more, it must be accompanied by a certified copy of orders to such duty, with all endorsements. A certification by your commanding officer will verify your participation in 14 organized drills.—ED.

Navy's First RDs

SIR: Since most of the RDs know their rate backward and forward either through course books or by experience, we believe there's one thing that everyone can use—a little information on when this rating was established. Can you supply any information on when the RD rating came into being?—Radar Gang, FADTC, San Diego, Calif.

Souvenir Books

In this section ALL HANDS prints notices from ships and stations which are publishing souvenir records and wish to advise personnel formerly attached. Notices should be directed through channels to the Chief of Naval Personnel (Attn Editor, ALL HANDS) and should include approximate publication date, address of ship or station, price per copy and whether money is required with the order.

USS *Hornet* (CVS 12)—Work has been completed on the 1958 *Hornet* Cruise Book Westpac. It is now available and can be obtained by sending your name and address along with $4.25 — this includes postage — to Cruise Book Editor, USS *Hornet* (CVS 12), c/o FPO, San Francisco, Calif.

• *Glad to oblige. The rating of RD3 and RD2 were established by BuPers Circular Letter 33-43 of 24 Feb 1942; RD1 by SecNav Letter of 15 Feb 1943 and BPCL 22-43 of 26 Feb 1943. BuPers Circular Letter 205-43 of 12 Oct 1943 established the RDC rating. For more on Navy ratings, see the August 1958 issue.*—ED.

Sailing with Salish

SIR: If you don't mind the continuance of a little friendly rivalry, USS *Salish* (ATA 187) submits that she may come close to the top of the "miles steamed" competition among Fleet tugs on the basis of the following statistics: In June 1958, *Salish* covered 4870 nautical miles. Backing and filling boosted this to 7152 engine miles. During the first seven months of this year she's gone 19,488 nautical miles and has towed three tugs, three destroyer escorts, eight Fleet minesweepers, one landing ship, and one high speed transport.

Salish, an 8th ND tug homeported in New Orleans, feels she might well adopt the motto "Have tug; will travel." We think we might have the most miles in a month of any tug (ATF or ATA), and we're looking forward in another couple of months to beating *Penobscot*'s 11-month record of 26,970 miles. "Sayonara," PacFlt tugs!—D. R. S., LTJG, USN.

• *Smashing record! Keep up the good sailing.*—ED.

Leave before Retirement

SIR: I would like to pose this hypothetical question. An officer is slated for placement on the retired list on 1 Jun 1959. At that time he will have 77 days of leave on the books.

According to Article C-6105 (1) of *BuPers Manual*, the amount of earned leave upon discharge or separation from active duty cannot exceed 60 days, so this means he has 17 days of extra leave.

In order not to lose those 17 days, could he be detached 14 May 1959 on retirement leave, with his leave to expire at 2400 on 31 May 1959, and still be paid for the remaining 60 days of unused leave?—D.W., Jr., YNC, USN.

• *Sorry, but there are no regulations which permit detachment on a date immediately before placement on the retired list for the sole purpose of using up excess accrued leave, which in effect, is what this officer would be doing.*

If he does decide to use the 17 days of excess leave he will have to take it as authorized annual leave prior to retirement date, returning in time to complete his processing (physical examination, etc.). If he does not take the annual leave the number of days involved would be lost, of course.—ED.

Availability for Transfer

SIR: My rotation tour date and expiration of active obligated service is September 1958. In accordance with current instructions, if I agree to re-

CRAZY, MAN—Samisen band from crew of *USS Salisbury Sound* (AV 13) gives out with most in Japanese music.

enlist or extend at the end of my expiration of active obligated service, I will be made available immediately to the Bureau. Supposing I reenlist early, would I still be made available immediately, or would I be allowed to complete my original shore tour?—F. J. D., PN3, USN.

• *Let's make a distinction between "availability" and transfer. You would be made available immediately if you reenlist early, but you will not be transferred until your original tour ends, in September.*—ED.

For Meritorious Action

SIR: I'm outnumbered and need your help.

Whenever I mention that a friend of mine received a meritorious promotion from BM1 to BMC in 1951, all my shipmates say I'm wrong. I hope you can verify this and set them—or me—straight.—H. W. D., MN1 (SS), USN.

• *This is not the first time that* ALL HANDS *has been called to the rescue, but it appears that you already know what you're talking about and do not need our help.*

Meritorious advancements are sometimes authorized by the Chief of Naval Personnel during wartime. During the Korean conflict (1950-53) a few Naval personnel were advanced for meritorious action, so it is highly possible that your BMC friend was one of them.—ED.

Arigato Gozaimasu!

SIR: While browsing through a worn, finger-stained copy of the May issue of ALL HANDS and, in picking out finer details that I overlooked previously, I found an error on the front cover.

You state that the cover picture is a print of a Navyman and his Korean friend. I find this hard to believe since the second man is not Korean, but Japanese! I intend to prove this to you by pointing out that the writing on the old man's apron is in Japanese *katakana*—(sa) (pause) (bu) (su); the English counterpart to this is "Service." Am I not correct? And, may I suggest that you use an interpreter in the future?—G. E. B., YN3, USN.

• *Say (pause) you are so right. We bet you'd make a perfect lookout. May we offer our muchas gracias, which (for the benefit of non-linguists) is the Latin-American equivalent of "arigato gosaimasu."*—ED.

Navy Band Hits a New Note

SIR: A little while back I happened to be in Sasebo, Japan, when I came across a group of U. S. sailors garbed in oriental costume and playing oriental instruments. Can you tell me if we have a band like this?—I. S. B., SN, USN.

• *You are probably referring to the band which greeted* USS Pine Island *(AV 12) when she came alongside* USS Salisbury Sound *(AV 13) to take over flagship duties.*

The delicate sing-song strains of the "Sally's Samisen Band" tinkled across the water as the gap between the two ships narrowed.

Idea for the band was first suggested by RADM P. P. Blackburn, Commander, Taiwan Patrol Force, during Salisbury Sound's *travels in the Far East to Taiwan, Okinawa, Japan and Hong Kong.*

You won't find the instruments used by this "band" in the Navy School of Music's library. They and the "uniforms" were purchased in Hong Kong. For another unusual Navy band, see ALL HANDS, August 1957, page 23.—ED.

What's in a Name, or How Does It Start?

SIR: I have noticed that ALL HANDS frequently uses such terms as "shipboard," "surface-to-air" or "surface-to-surface" in talking about guided missiles.

If I may, I would like to make a suggestion. Were the terms "sea-based," "sea-to-air," "sea-to-surface," etc., used, perhaps a more accurate impression would be created. The phrase, "sea-based," to my mind immediately paints a vivid picture of missile bases on the move. It tends to differentiate distinctly between land-based missiles and mobile naval missiles, and can highlight the fact that seagoing missiles are very definitely an important part of our FLEET OF THE FUTURE—a Fleet we sailors are proud of.—T. E. L., YNT3, USNR.

• *Your suggestion certainly has merit, and so far as we can tell there isn't much reason why we shouldn't adopt it. In fact, we thought the idea was so good that we passed it along to RADM C. C. Kirkpatrick, the Chief of Information—as you know by now from the letter he wrote you on the subject. For the benefit of our readers, here's what the admiral had to say:*

"I think you have a fine idea there, and I am going to do my best to further general adoption of your proposal.

"The sort of thinking evidenced by your letter is what we need throughout the service to further our public information effort. If everyone could come up with one idea as sound as yours, we would have a program that would be hard to beat."

Other than the fact that we just didn't think of it, about the only reason we can dream up for not having used terms like yours before is that "surface-to-surface," "surface-to-air" and such are the classifications used by most missilemen and in most of the articles on the subject.

The word, surface, has been employed in missile nomenclature since the late 1940s, when a standard system, similar to that used in aircraft abbreviations, was set up for missiles. That system of abbreviations is no longer used, but the word, surface, has apparently carried over from it since it is handy in inter-service application. With it there's no need to differentiate between missiles launched from land and those launched from sea.

However, we don't know of any regulations that would keep us from pointing out that our surface missiles are launched from the sea.—ED.

UP AND DOWN—A jet Crusader F8U-1 makes a touch-and-go landing on the deck of *USS Intrepid* (CVA 11) during training exercises on the high seas.

Length of Sea Tours

SIR: BuPers Notice 1306 of 10 Mar 1958 states that the minimum average sea tour has been increased to three years and that first cruise personnel will not be rotated ashore.

If such is the case, what happens to the personnel who were qualified to submit rotation data cards under Seavey Segments One and Two, but did not have the three years of sea duty or who may be first cruise personnel? I'm confused!—W. C. S., YN1, USN.

• *We went to the source to get the answer. Here it is:*

The term "average minimum sea tour" is applicable to certain ratings, such as yeoman, which have a high shore/sea billet ratio. (In other words, where a large percentage of the billets are ashore.) For any particular individual the sea tour in these ratings can be from two to four years depending on the month they start their sea tour and the month they are transferred to shore duty. The average person in these ratings has a three-year tour.

In Seavey Segment 1-58 the minimum sea tour for yeomen was set at 18 months instead of the normal minimum of two years because of the shortage of yeoman who had been at sea any length of time. As soon as the sea service of yeomen builds up, the tour will be moved up to a minimum of two years and an average *minimum of three years.*

The statement that first cruise personnel are not rotated ashore is a general one and does not hold true in all cases. There are always some exceptional cases. The average first enlistee has 3.2 years of active obligated service (when minority enlistments and reservists are included). Normally, after a first cruise man completes recruit training, Class "A" school, and the minimum of two years at sea, he does not have sufficient active obligated service for shore duty even though he is on the Seavey. If he extends or reenlists to have the required obligated service, then he is not considered "first cruise." If a man's first enlistment was for a six-year hitch, then there's a good possibility that he will get shore duty during his first cruise.—ED.

The Great White Fleet

SIR: In your May 1958 special supplement, "The Great White Fleet," I noted two errors.

On page 60 you say that at Callao, Peru, white-clad naval cadets spelled out the word "WELCOME" on a mountain side as the Fleet steamed through the harbor. This is not so. The word was spelled out, as you say, but at Valparaiso, Chile—not Callao. Incidentally, when the Fleet passed out of the harbor the cadets changed position and spelled out "FAREWELL."

On page 63 you have a picture of USS *Maine*, but she isn't the *Maine* which took part in the cruise. Instead, she's the one which blew up in Havana Harbor on the eve of the Spanish-American War.—W. E., LCDR, USN (Retired).

SIR: On page 63 of your May 1958 issue you printed a picture of the wrong USS *Maine* among those of ships which were in the Great White Fleet. The one pictured blew up in Havana Harbor in 1898.

The right *Maine* was the sister ship of the old USS *Ohio* and *Missouri* which are shown on the same page.—P. R. O., CAPT, USN.

SIR: Was surprised to see the illustration on page 63. As you must know, this ship was the ill-fated *Maine*, and not the one which was with the Great White Fleet.—Edwin A. Patt, Executive Secretary, The Steamship Historical Society of America, Inc.

• *From now on we'll certainly "Remember the* Maines." *And, we'll also remember to double-check the location of human greeting signs, since the Naval History Division agrees that the cadets were on a mountainside at Valparaiso, and not Callao.*

As for the main error, the Maine *error, we really knew better, but somewhere along the line we slipped and let the wrong ship get into print. The* Maine *in our picture was the one which blew up in Havana Harbor on 15 Feb 1898.*

The keel of the second Maine—*the* Maine *we should have shown—was laid on the first anniversary of that disaster. Rated a second-line battleship, she had a normal displacement of 6682 tons. She was commissioned on 29 Dec 1902 and, except for one Med cruise, spent most of the next five years along the Atlantic Coast and in the Caribbean.*

On 16 Dec 1907, with the rest of the Battle Fleet, Maine *set out from Hampton Roads, Va., on the famous globe-circling good will voyage. Together with the other ships she made the trip around the Horn and the various stops along both coasts of South America. However, while the Fleet was at San Francisco, Calif., from 6 May to 7 Jul 1908, she received orders to head for home.*

In August 1909 the second Maine *was placed out of commission. She had six months' active duty in 1911 and a Middie cruise to Europe in the summer of 1914.*

On 5 Apr 1917, just the day before America entered World War I, Maine *went back into service, but by then she had gotten along in years and was relegated to a minor role as a troop transport and training vessel along the Atlantic Coast.*

In January 1922 she was sold.—ED.

Ship Reunions

News of reunions of ships and organizations are carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

• 19th Naval Construction Battalion—The 10th annual reunion will be held in New York City on 19, 20, and 21 September. For further information, write to Herbert McCallen, 655 East 14th Street, New York 9, N. Y.

• USS *Donnell* (DE 56)—All former crew members interested in holding a reunion with time and place to be decided may write to BOSN J. P. Hinckle, USN, USS *Shasta* (AE 6), c/o Fleet Post Office, New York, N. Y.

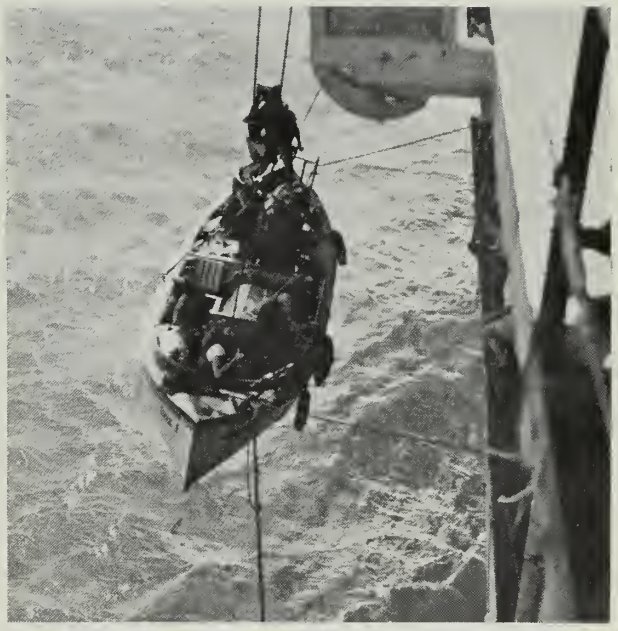
• VR-3, Moffett Field, Calif.—All VR-3 Navy Personnel from E-3 Division that served at Moffet Field, Calif., from January 1952 through June 1955 who are interested in holding a reunion may write to James Franklin, 1942 Higley, Cedar Rapids, Iowa.

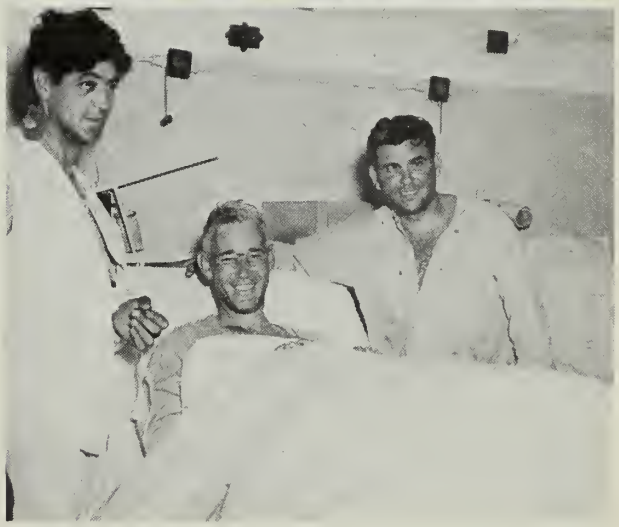
Rescue at Sea

TEAMWORK saved the lives of three Air Force men when their plane crashed into the Pacific 185 miles north-northwest of Johnston Island. A Marine helicopter from the decks of USS *Boxer* (CVS 21) picked up the survivors by means of its rope ladder only minutes after they had been sighted by an Air Force search plane.

The airmen who had been clinging to a wooden box for some 12 hours were "whirlybirded" to the Navy carrier where they received medical attention. From the spot where the plane went down the copter and a whaleboat from *Boxer* also retrieved a mail bag. Three Navy destroyers participated in the search for the *Globemaster* that had reported engine trouble on a flight from Honolulu to Wake Island. They were USS *Spronston* (DDE 577), USS *Ammen* (DD 527), and USS *Ingersoll* (DD 652).

Above: Copter from USS *Boxer* hovers over mail bag as whaleboat moves into site of crash. *Right:* Carriermen lower boat to search waters. *Lower Right:* Survivors smile, thankful to be safe on board *Boxer*. *Below:* Navy medical corpsmen remove Air Force men from copter on deck of carrier.





KEEPING TRACK — Quartermaster charts ship positions. *Rt:* Blocks on wall chart indicate merchant ships.

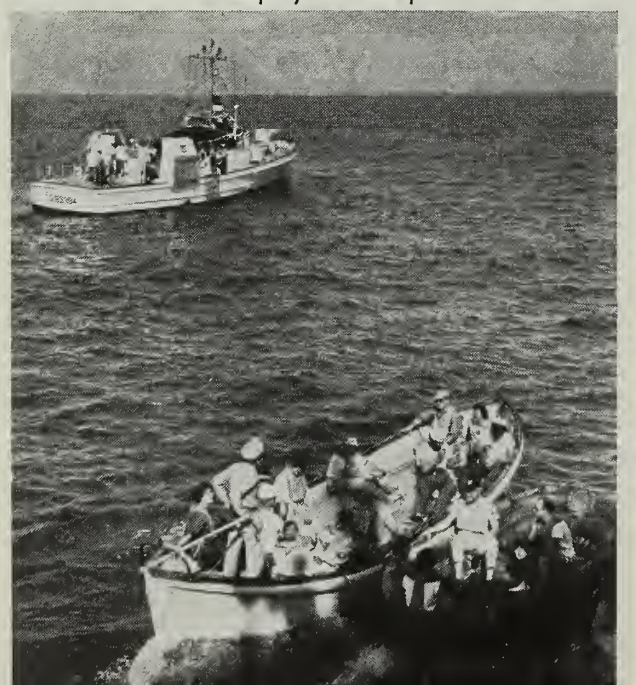
The SARmen: It's Nice To Kno

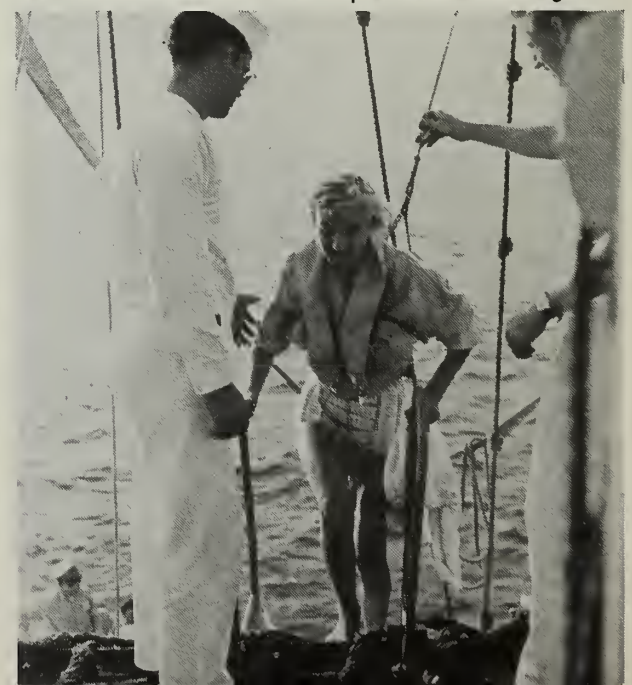
EARLY IN 1958, a major airline celebrated the arrival in Hawaii of the 1,000,000th passenger that it had carried across Pacific waters. It took that airline 20 years to reach this mark, but it will take much less time to repeat that performance.

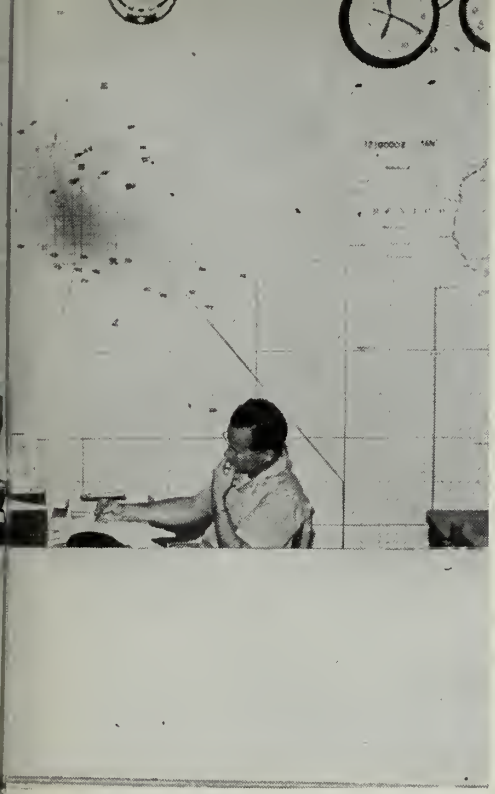
Among the many people working to make this a safe crossing for servicemen and civilians alike is Search-and-Rescue located in the mid-Pacific. They are the "watch dogs" of both planes and ships. If you have to pass through or near Hawaii, a team of highly skilled rescuemen will be keeping tabs on your safety. A sizable number of these are Navymen. Here's how they look after you.

At Honolulu position reports are required from your pilot if he, like nearly all overwater fliers, files an instrument flight plan. These reports go to the CAA. If your plane gets

'DRY RUN'—Airline employees take part in rescue drills at sea with SARmen. *Above:* Copter rescues during drill.







NAVYMEN check Pacific ship traffic.

They're Around

into trouble or is overdue, CAA will contact Navy and Coast Guard rescue centers in Oahu. An escort plane will fly out to intercept and guide you to safety.

If your plane must ditch it will drop you survival gear, and stand topside as a radar target for other planes and ships heading to the rescue area.

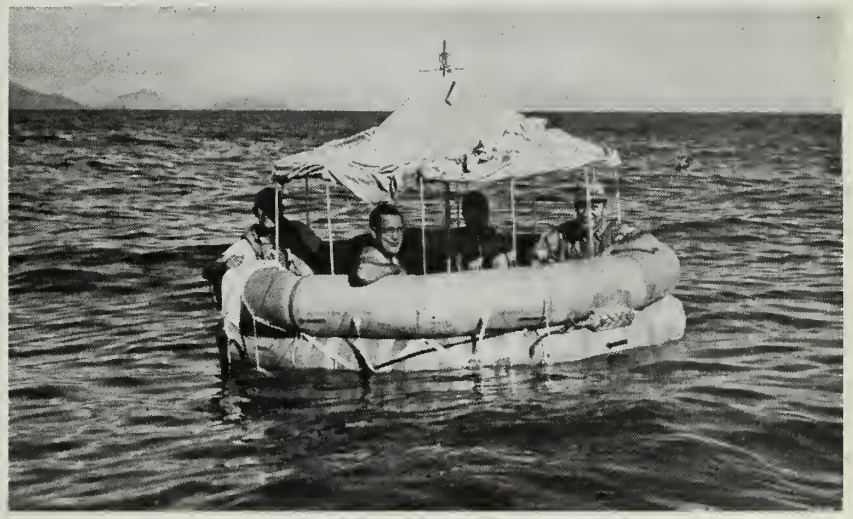
At the same time Navy and Coast Guard radiomen will be calling merchantmen and warships to your aid. SARmen also have the power to summon help from any armed forces unit in the Pacific. The Federal Communications Commission will help by using its direction-finder network to pick up and get a fix on any signals you send.

If you are in a ship and need help, the same system will go into action to speed help in your direction. And, after the SARmen have saved you they will put their heads together to figure how they can do it better and faster for the next person, ship, or plane that gets into trouble.

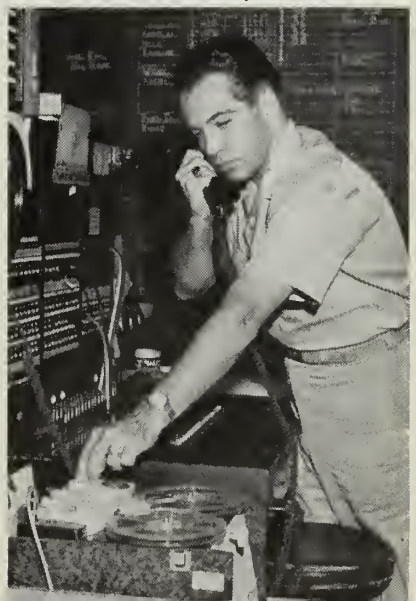
In addition the Search-and-Rescue men hold rescue drills that keep rescue teams as well as personnel from airlines and steam ship lines informed on the procedures they should follow in case of emergency.

—Joseph Harrington, JOC, USN.

FLOAT LIGHTS readied to help plane ditch. *Below:* Safety team tests gear.



GIBSON GIRL radio and kite antenna demonstrated by Coast Guardsmen. *Rt:* Navy Search-and-Rescue Control Center gets word of missing plane via CAA.



Our Good Friend, the Fish

MAYBE YOU DO and maybe you don't know something about fishing.

Chances are that, as a salt water sailor, you do. And you've got lots of company. Last year, for example, approximately 20 million people in the United States purchased fishing licenses. In addition, there are an estimated 20 to 30 million more persons who fish without a license—legally. Being a Navyman, you most likely fall into the latter category—no license is required for fishing in salt or tidewaters, except along the coast of California. (For rules on licenses, state by state, see the September 1955 issue of ALL HANDS, p. 54.)

But if you don't know anything about it, you ought to investigate.

Fishing may someday provide you with the only source of food available. There's always the possibility that you will have to fish for food—as a matter of life

or death—whether you like fishing as a sport or not. If such were the case, fishing would be a matter of survival instead of a form of recreation.

In the event you are ever forced to abandon ship and spend a number of days in a lifeboat, or are aboard a plane that is forced to ditch at sea, you'll be mighty thankful that you know something about fish and other forms of sealife, and how to catch them. A great majority of the survival training given to naval aviators emphasizes the importance of fish as a source of food and water. This is information that every Navyman should know.

Time after time you hear of persons being rescued after spending countless days at sea without food and water, who credit their survival to fish and other forms of sea life. Before going into the various methods of catching fish, either as a sport or, if the need arises, as a "lifesaver," it is important that you know something about them, such as their habits and characteristics.

TO START AT the beginning, practically all animals that live in the water are called (correctly or not) "fish." There are starfish, cuttlefish, jellyfish, swordfish, seals and whales, to name but a few. All of them live in the water but the swordfish is the only one of those listed that is actually a fish. Seals and whales are warm-blooded mammals while the others are from the wide variety of creatures "without backbones."

Real fish have backbones and are cold-blooded. Although they live in the water, fish actually breathe (through gills). Instead of having arms and legs like other animals, fish have two pairs of fins, and in some species, several other fins as well.

The fins that correspond to arms are called pectoral fins, while the pelvic or ventral fins take the place of legs. The odd or unpaired fins that some fish have are located on their back (dorsal), tail (caudal) and stomach (anal). There's no fish with more than two pairs of fins, but you'll find some, eels for example, with only one pair of fins.

A great many fish have protective scales, while others do not. The scales overlap each other in the same manner as shingles do on a roof. As a fish grows bigger, so do its scales. If a fish looses its scales, it will grow new ones.

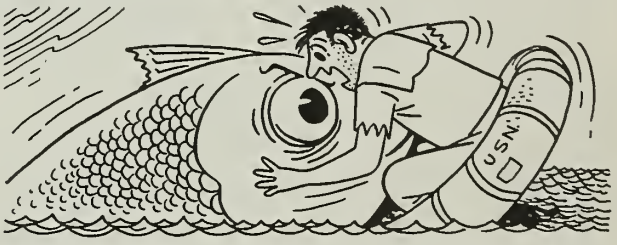
While human growth stops with old age, most fish continue to grow as long as they live. Thus, in most cases, if you catch a real big fish, you can be assured that he's been around for quite some time.

Some fish are very streamlined and have that futuristic look. In fact, many of today's ships and planes, especially submarines, are patterned after fish. U.S. Navy subs are named after them, as well.

FISH ARE FASCINATING. They take on every possible size, shape and form imaginable. You'll find fish that defy all descriptions of the typical fish. As already noted, fish differ according to the number or position of fins, with or without scales and there are even fish that can live out of the water. When it comes to shapes, you name it, and a fish will have it. There's the highly streamlined shark, triangular-shaped skate, and numerous different sea horses—which are true fish—that look like horses standing on their tails.

If you got a "horse laugh" out of that rare fish, brace yourself, for if you ever happen to see a ribbon or oarfish, you may end up telling your shipmates "fish stories" about seeing sea serpents. Most likely, many of the weird stories of sailing days of yesteryear got their start from sailors who saw these creatures of the deep.

The oar/ribbon fish are usually about 60 feet long and have a bluish-silver body. From a distance they look like a horse with a streaming red, ribbon-like mane.



They have a flaming red-tipped dorsal fin that runs the full length of the body and reaches a high crest over their extended jaws.

Other weirdies include the rabbitfish that looks like Bugs Bunny, the flounder or flatfish which is, as its name implies, as flat as a pancake; and the giant ocean perch which appears as if it were all head and no body.

All told, there are more than 20,000 different kinds of known living fish and another 20,000 species of fossil fish. In addition, there are new ones being discovered almost every year.

Possibly one of the most unusual of all fishes are those that carry their own hook, line and bait to catch other fish. For obvious reasons these deep sea fishermen are called angler fish. Their back fin has a spine that

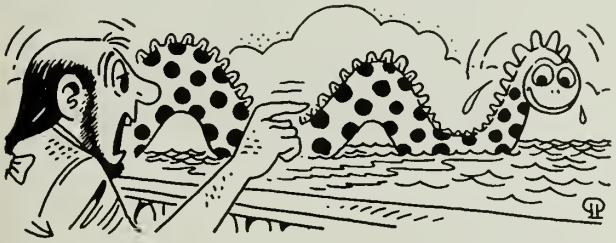
extends—this is their fishing pole—and in some species it's jointed and can be cast forward and pulled back to the mouth. From its tip hangs the "bait" (long, fleshy, tentacles) that can be expanded and contracted.

Other forms of angler fish have luminous bulbs at the end of their fishing poles which they dangle in front of their mouths and flash on and off to attract victims.

FISH DIFFER IN SIZE as much as they do in shape. Some gobies found in the Philippines are only a quarter of an inch long and weigh as little as half a grain. In contrast, the whale shark—the largest of all fish—reaches 50 feet in length and weighs as much as 20 tons.

Although you use your arms and legs to swim, a fish swims by moving its body and tail sideways. They use their arms and legs (fins) for balance, steering and braking.

Some fish even use JATO (jet-assisted-take-off) very



much in the same manner as the Navy uses it on its planes and missiles. Fish, however, use water for fuel—instead of solid rocket propellents—which they shoot out of their gills.

Many fish, especially those with crescent-shaped tails such as mackerel and tuna, are extremely fast swimmers. It's not unusual for them to cruise for hours at speeds up to 30 knots. Sailfish, for example, in short speed runs can go faster than 60 knots. So, if you hook into one of these speed demons, don't try to stop him on his initial run.

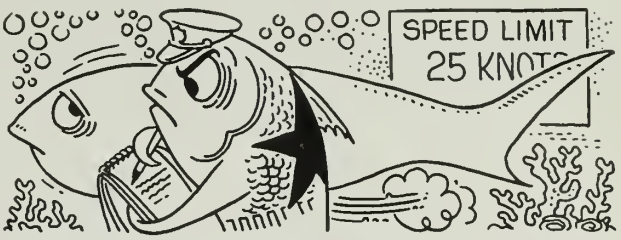
At those speeds, you would think that fish would be flying. That's what flying fish and sailfish sometimes do. They have large pectoral fins which enable them to glide from the crest of one wave to another, and farther.

You'll find some kind of fish wherever there is water. There are exceptions to this (and practically every other statement about fish) as you won't find them in water which is too salty such as that found in the Dead Sea or the Great Salt Lake of Utah, or in water that is polluted. Where the water is too salty or filled with waste, most fish cannot find enough oxygen to breathe. Other than that, fish can be found from the sunny surface of the ocean, down to the blackest depths where light never penetrates.

NORMALLY, THE GREATEST number of fish are found off the continental shelves in cold water regions. They frequent these areas—centered off both coasts of northern U.S. and Canada; in the North Sea, and around Japan—because the greatest source of food—tiny plants called diatoms—thrive there.

In the deep portions of the ocean where there is limited plant life and no light you will find fewer fish. In the murky depths, fish have little to eat except one another or what few scraps sink down from the surface.

Most fish feed on smaller fish and in turn make up the menu for larger fish. Indirectly, however, all fish depend on "plankton" as their main course. Plankton



consists of one-celled plant life (diatoms), one-celled microscopic animal life (protozoa), eggs and larvae of fish and shellfish, tiny shrimp-like creatures, and countless other forms of minute sea life.

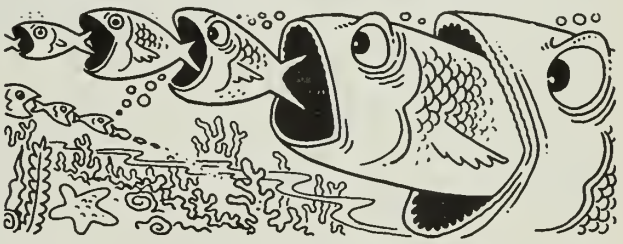
Many fish, such as the herring, eat nothing but plankton. (It's edible for humans too.) Herring, in turn are the main source of food for codfish and pollock. In fact, no matter what fish you name, you can trace its food supply down to the plankton, principally diatoms. When it comes to food, fish are the same as animals on the land—ultimately they all depend on plant life.

Surprisingly, fish drink water. Although they may live in the ocean, their body tissues contain fresh water. You can get enough water from fish alone to keep you alive for many, many days.

FISH HAVE MANY DIFFERENT ways of protecting themselves. Some, such as sharks, tarpon, tuna and salmon, take advantage of their speed, while sailfish, swordfish, marlin and sawfish are armed with deadly spears and saws. The barracuda, for example, is called the "Tiger of the Sea," and is known for its sharp teeth.

Torpedo and other electric fish can give you the "shock of your life," while other fish have poisonous glands that are capable of inflicting painful or even fatal wounds.

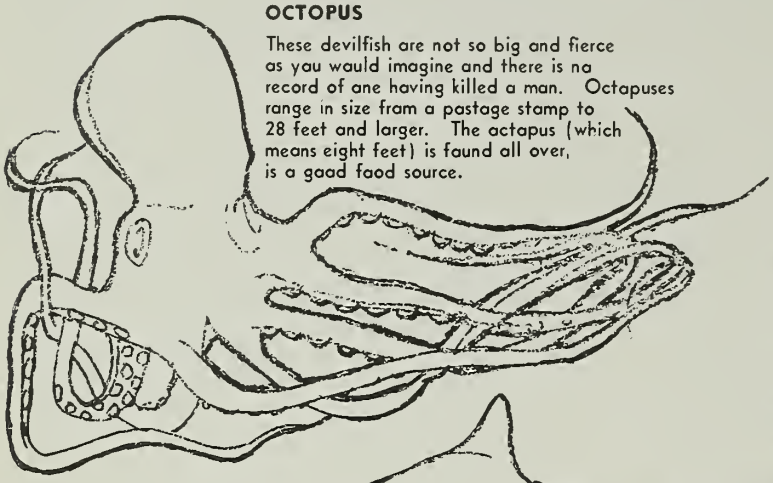
While a few fish have extreme speeds or deadly weapons to defend themselves, the majority of them have protective coloring which enables them to blend in with their surroundings, thus making it difficult for their enemies to see them. Most South Seas or warm water fish are extremely colorful and have vertical stripes which camouflage them. Many fish, the flat fish or flounder for example, are capable of changing colors or patterns depending upon the background.



In addition to these features, fish also have their own form of an advanced early warning system. They have a lateral line—made up of a mass of nerves—which extends the length of their body. Scientists believe that through this line fish are capable of detecting movements in the water or else "feel" other fish approaching them. Many fish also have feelers or sensitive barbels under or at the sides of their mouths, with which they search for food on the bottom of the ocean.

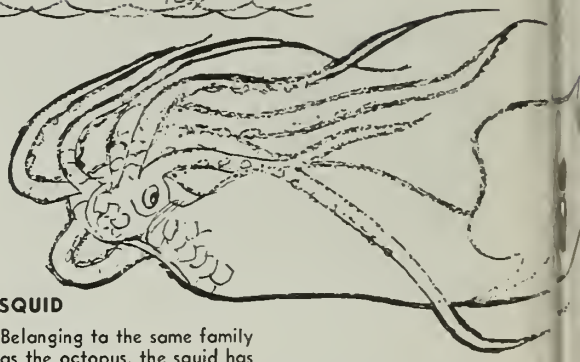
(Continued on page 38)

SEA L



OCTOPUS

These devilfish are not so big and fierce as you would imagine and there is no record of one having killed a man. Octopuses range in size from a postage stamp to 28 feet and larger. The octopus (which means eight feet) is found all over, is a good food source.



SQUID

Belonging to the same family as the octopus, the squid has 10 tentacles and has been known to attain a length of 60 feet. Like the octopus, the squid squirts out an inky fluid to hide it from danger, and, as with all members of the head-footed group, it can change color instantly. Small squid living near the shore are good eating.

HORSE

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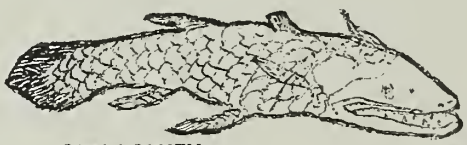
OCEAN SUNFISH

The largest fish is one of the oddest. This fish looks like a gigantic fishhead without a body and weighs more than a ton. They are sometimes 10 feet in diameter but very few live to grow up.

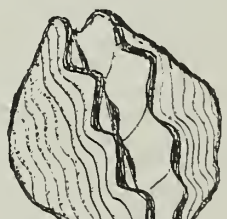


COELACANTH

Believed to be extinct for 70 million years, this relic of prehistoric times was rediscovered in 1938 in the Indian Ocean.

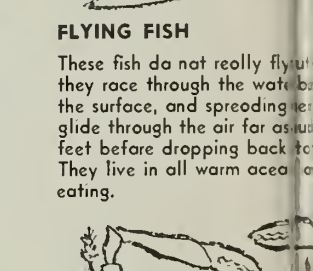
MUDSKIPPER

This remarkable fish not only swims but climbs trees and is able to walk on land while obtaining food. It is only a few inches long and is found in the South Atlantic off West Africa and in the South Pacific.



GIANT CLAM

This clam is a native of the oceans west of India and may grow nearly four feet across and weigh as much as 500 pounds. Meat alone from this clam may weigh 25 pounds and is good eating.



FLYING FISH

These fish do not really fly
they race through the wate
the surface, and spreading
glide through the air for as
feet before dropping back
They live in all warm ocea
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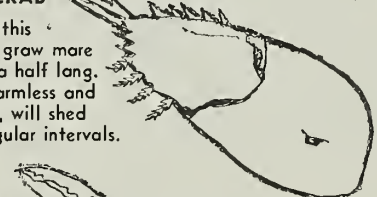
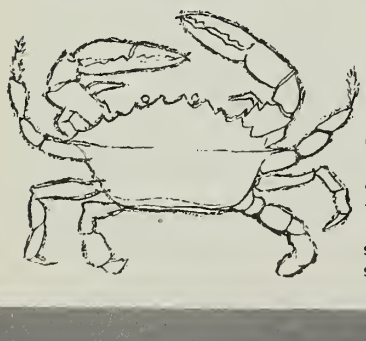


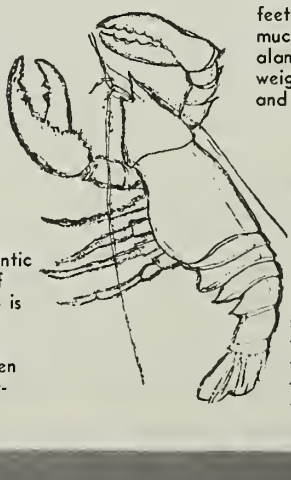
HORSESHOE CRAB

Not a true crab, this fellow will often grow more than a foot and a half long. They are quite harmless and like regular crabs, will shed their shells at regular intervals.



BLUE CRAB

Found along the Atlantic Coast and the Gulf of Mexico, the blue crab is our most common food crab. When it molts, it may be eaten shell and all as a soft-shelled crab.



AMERICAN LOBSTER

The biggest lobster ever caught weighed 39 pounds but the average is from one to three pounds. It has two claws—one with sharp teeth for holding food and the other dull for crushing it. They are found crawling amongst the rocks on the bottom.

SPIDER CRAB

This fellow lives in b
Atlantic and Pacific
waters and has given
swimmer a good nip

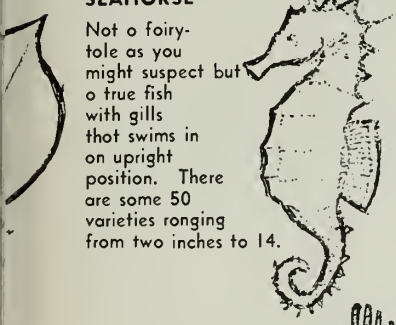
IFE RECOGNITION GUIDE FOR THE SAILOR

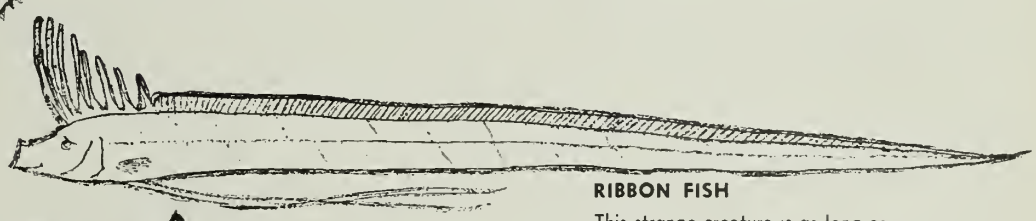
Survivol on the oceon depends to o large extent on the rations and equipment you have with you, the use you make of them, ond the degree of skill, ingenuity, ond resourcefulness you employ. Fish moy be your only source of food and water, ond since there ore over 20,000 species, only some of the moin vorieties ore illustroted here to familiorize the soilor.

Most fish found in mid-oceon ore sofe to eot. Poisonous fish ore usuolly found near the coost, corol reefs, and olong mud ond sond bonks, except for those found olong the shores of North Atlontic ond Atlontic Oceons. Don't eot shark unless you hove ample supply of woter. The some holds true for skotes, roys, seoweed, and crob. Jellyfish, seosnokes, porrotfish, and pufferfish ore in most coses poisonous. Don't eot ony fish eggs found in clusters an rocks, logs, or reefs. The heort, liver, ond blood of fish are good to eot. The stomach of lorger fish moy contoin portly digested smoller fish which ore good to eot. Fish eyes contoin o lorge percentoge of woter. Fish spoil quickly in worm weather; therefore, cleon ond eot without deloy, ond dry whot is left.

SEAHORSE

Not o foiry-tole as you might suspect but o true fish with gills thot swims in on upright position. There are some 50 varieties ronging from two inches to 14.





RIBBON FISH

This strange creoture is as long os o roilrood cor ond weighs up to 650 pounds. It hos o reddish crest the length of its body.

KEREL TUNA

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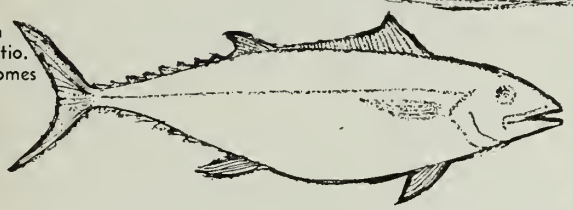

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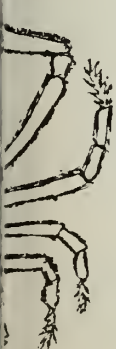

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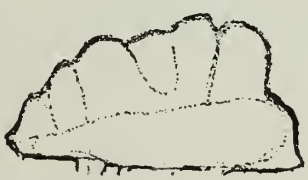
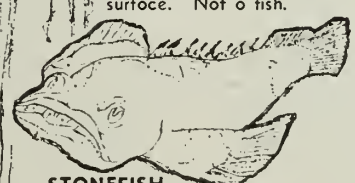
POISONOUS FISHES



PORTUGUESE MAN-OF-WAR AND JELLYFISH

Stoy owoy from these creotures os their long tentocles con porolyze or even kill you. They ronge in size from microscopic to 130 feet in length ond most vorieties live near or floot on the surfoce. Not o fish.



STONEFISH

Another habitont of tropical waters is this paisonaus bottom fish with o row af sharp spines each cantaining enaugh poison to kill a man.

TOADFISH

A poisonous tropicol fish found on the bottom. He hos enormous jows and is usuolly less thon o foot in length. He doesn't hunt but woits for his food ta swim to him.

PUFFERFISH

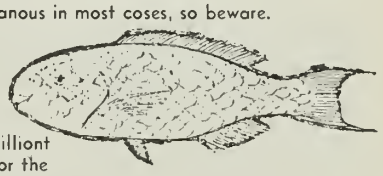
These thick, taugh, and slimy-skinned creotures are covered with bristles and con blow up like a ballaon when olormed. Most have o disogreeoble ador and are paisonous.

TRIGGERFISH

A tropical fish with o sharp dorsol fin, no scates, and eyes set very far back. This creoture is olso poisonous.

COWFISH

Not only does this fish have a poir of horns, but it lives in o hord shell like a tortoise. It is paisanous in most coses, so beware.



PARROT FISH

A tropical fish of brilliont color which lives neor the shore ond possesses o toxin in its flesh.

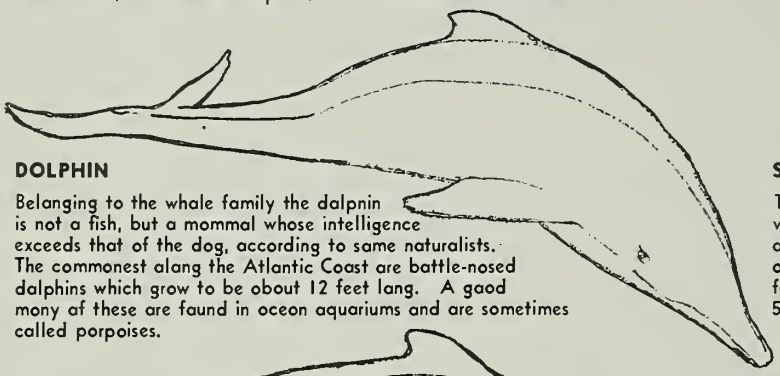
Prepared by ALL HANDS Magazine September 1958

SEA LIFE RECOGNITION CONTINUED

MAMMALS OF THE SEA

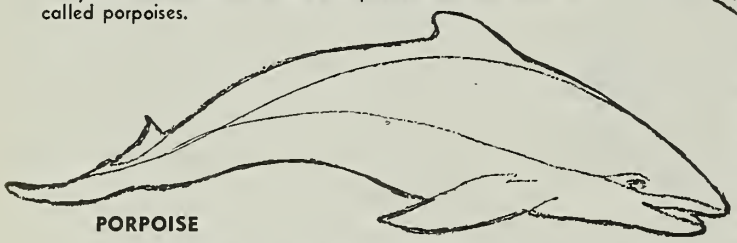
BLUE WHALE

The largest animal that ever inhabited the earth is the blue whale weighing over 150 tons and measuring 120 feet ar sa. His thraat is sa narrow that he cannat swollow onything larger than a gaod-sized orange. When he blaws out his breath, o column af vapar is sent 20 ta 25 feet in the oir.



DOLPHIN

Belanging to the whale family the dalpnin is not a fish, but a mommal whose intelligence exceeds that of the dog, according to same naturalists. The commonest alang the Atlantic Coast are battle-nosed dalphins which grow to be obout 12 feet lang. A gaod mony af these are faund in oceon aquariums and are sometimes called porpoises.

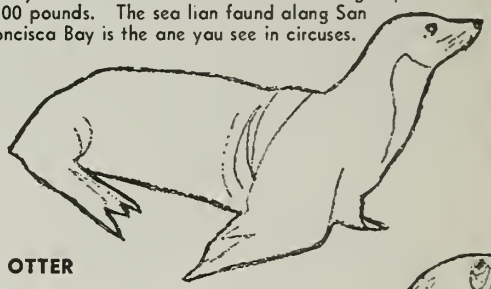


PORPOISE

These fellows are o very smoll kind of whale and come to the surface of the water to breathe os whales do. They vory fram faur to seven feet in length and weigh up to 125 pounds. They are harmless and have flesh tasting somewhot like park.

SEA LION

A member af the seal family the sea lion lives moinly in the Arctic waters and males weigh up ta 1,300 pounds. The sea lian faund alang San Froncisca Bay is the ane yau see in circuses.



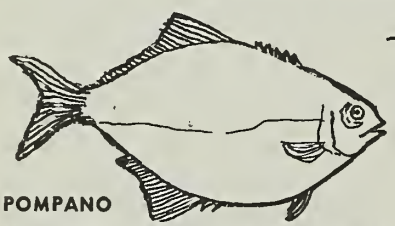
SEA OTTER

The sea otter has the mast valuable skin in the world and is found aff the coast of Alaska. He is obout five feet in length and weighs 50 to 70 pounds.

SEA ELEPHANT

This huge seol will graw 30 feet or so ond has long, tusk-like teeth ond o short, wrinkled trunk like thot af on elephont. They are found mastly on islands off the coost af South Americo ond sametimes migrote as far south as the Antorctic ice pack. They are valuoble for their oil, sometimes yielding as much as 200 gallons.

COMMON FOOD FISHES

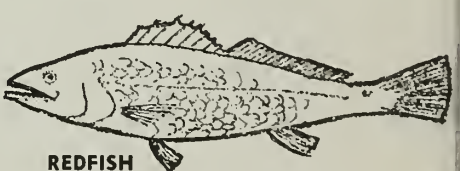


POMPANO

Approximately 18 inches long and weighing two to four pounds, this fellow is one of the most delicious food fishes. He is faund araund the sauthern Atlantic Coast ond the Gulf of Mexica.

BLUEFISH

Ranging from three to five pounds ond maybe 20, the bluefish is onother of our best food fishes. The younger anes ore colled snappers.

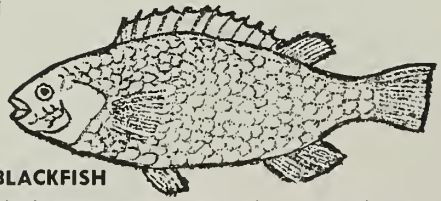


REDFISH

Usuolly o smoll fish, the redfish may grow two to five feet long. Much af its meat moy be faund on yaur frozen faad counter.

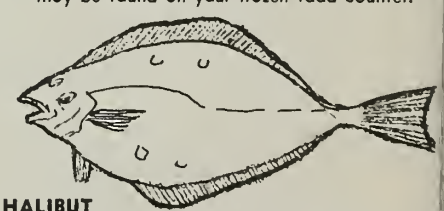
HADDOCK

Weighing about four pounds, this fish is similor ta the cod but smaller. Occasianally ane may weigh 36 pounds or sa.



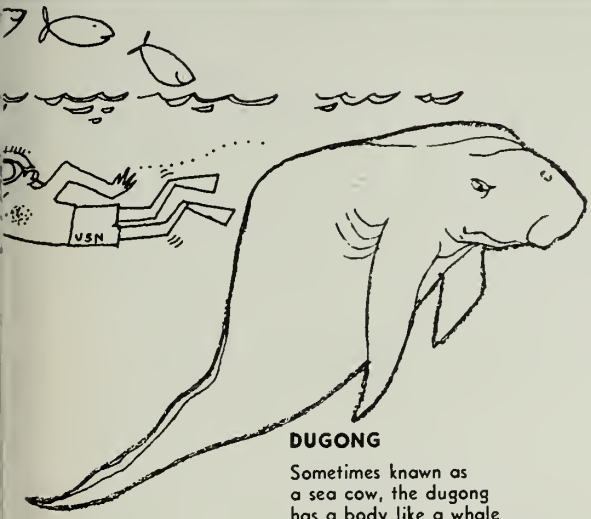
BLACKFISH

The blockfish is generally a foot ar twa long and weighs obaut seven paunds. The largest an recard weighed 22½ pounds and measured 36½ inches.



HALIBUT

The lorgest member of the flatfish fomily, the halibut may weigh as much as 700 paunds but the average is araund sixty. They live in the colder ocean waters.

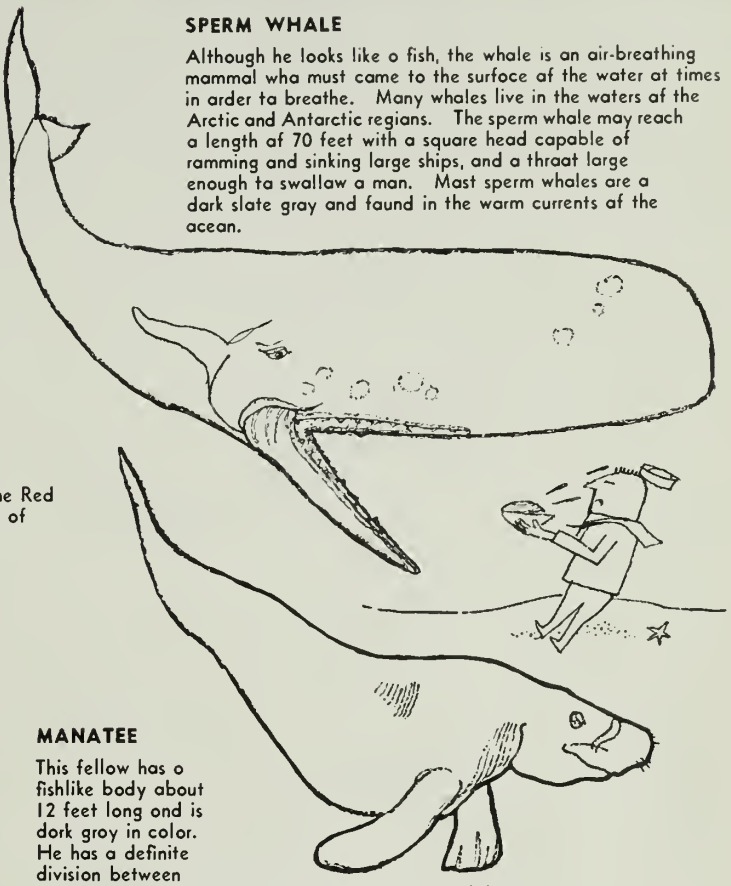


DUGONG

Sometimes known as a sea cow, the dugong has a body like a whale and a head similar to that of a hippopotamus. It is found in the Red Sea, Indian Ocean, and off the coast of Australia and lives on ocean plants.

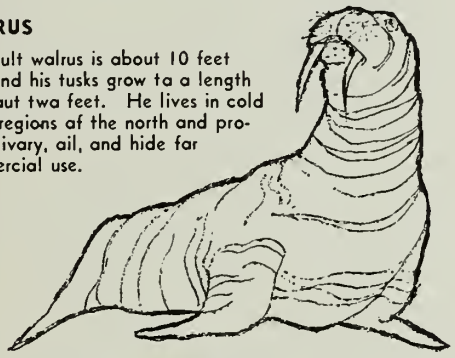
SPERM WHALE

Although he looks like a fish, the whale is an air-breathing mammal who must come to the surface of the water at times in order to breathe. Many whales live in the waters of the Arctic and Antarctic regions. The sperm whale may reach a length of 70 feet with a square head capable of ramming and sinking large ships, and a throat large enough to swallow a man. Most sperm whales are a dark slate gray and found in the warm currents of the ocean.



WALRUS

An adult walrus is about 10 feet long and his tusks grow to a length of about two feet. He lives in cold polar regions of the north and produces ivory, oil, and hide for commercial use.

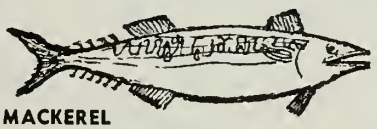


MANATEE

This fellow has a fishlike body about 12 feet long and is dark gray in color. He has a definite division between head and body, and his skin is thinly covered with hair. He lives in the shallow waters off the southern coast of North and South America and when swimming along in the water with his head above the surface, could easily pass for a "mermaid."

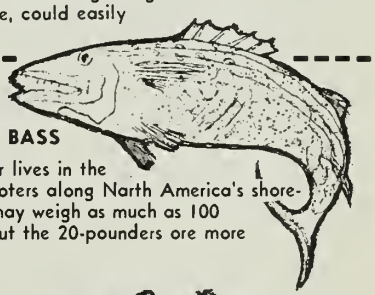
SARDINE

These little fish are actually young pilchards and are caught in the Mediterranean Sea and the Atlantic Ocean.



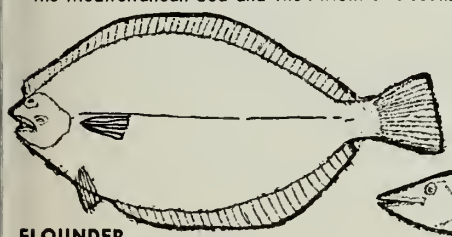
MACKEREL

An adult mackerel is 12 to 24 inches long and weighs upward of seven pounds. Good eating, of course.



STRIPED BASS

The striper lives in the shallow waters along North America's shoreline and may weigh as much as 100 pounds, but the 20-pounders are more common.

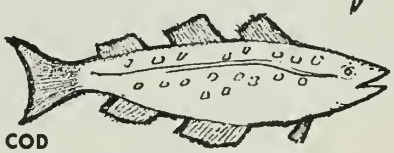


FLOUNDER

The winter flounder is most common along the Atlantic Coast and is sand- or mud-colored, living along the ocean bottom. The average length is about 15 inches and weight is a pound or two.

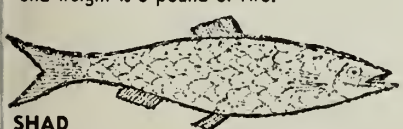
BONITO

Weighing from seven to 15 pounds, the bonito inhabits warmer waters and is very brightly colored.



COD

The cod is one of the most important food fishes and the average will be about 12 pounds. The largest ever caught was 211 pounds.



SHAD

Shad weigh from one and one-half pounds to five, although some twelve-pounders have been caught. A single female may lay as many as 50,000 eggs.

HERRING

Living in deep waters close to the surface, this fish is another very important food source.

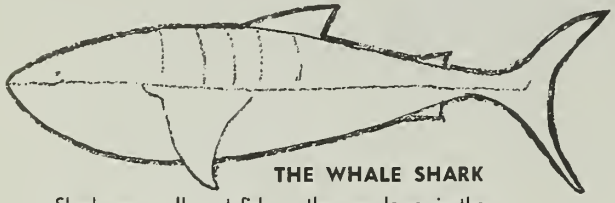
SMELT

Related to the salmon family and found along the Atlantic Coast from Canada to Virginia, the smelt grows about 12 inches long.

Prepared by ALL HANDS Magazine September 1958

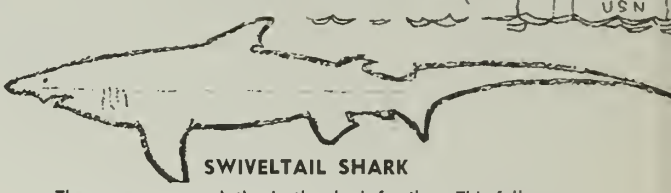
SEA LIFE RECOGNITION CONTINUED

SHARK FAMILY



THE WHALE SHARK

Sharks ore reolly not fishes—they are lower in the scole of vertebrotes. They ore the most fierce of all creotures in the seo ond lorger ones ore not ot oll ofroid of men. The whale shork reaches a length of 70 feet or more ond o weight of over 120 tons. It is considered the lorgest of shorks ond is dork or light brownish-gray, covered with light round spots.



SWIVELTAIL SHARK

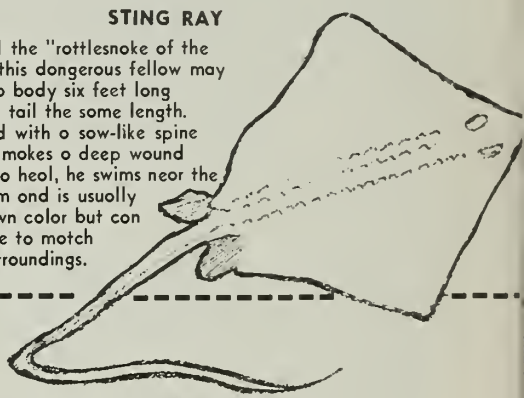
There ore mony vorieties in the shork fomily. This fellow moy be 20 feet long ond weigh 600 pounds. A big swivel-toil moy hove o toil os long os the rest of his body but he is hormless to humon beings.

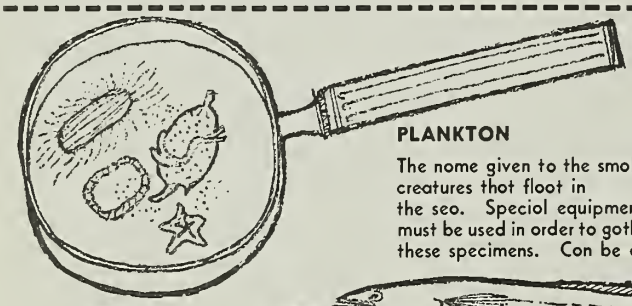
SPINY DOGFISH

This creoture, colled the dogfish becouse he hunts in pocks, is dork groy obove with o row of white spots on his side. He is only oboat four feet long ond weighs 12 or 15 pounds.

STING RAY

Colled the "rottlesnoke of the seo," this dongerous fellow may hove o body six feet long with o tail the some length. Armed with o sow-like spine which mokes o deep wound hord to heol, he swims neor the bottom ond is usuolly o brown color but con chonge to motch his surroundings.



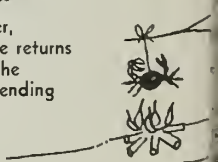


PLANKTON

The nome given to the smollest creatures thot floot in the seo. Speciol equipment must be used in order to gother these specimens. Con be eoten.

SALMON

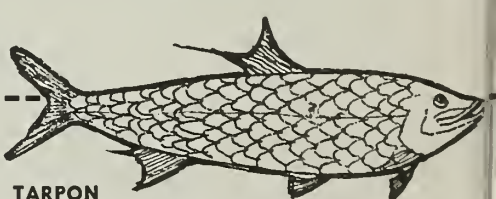
Although this fish is born in fresh woter, he spends his whole life ot seo until he returns to his birthploce, spowns ond dies. The lond-locked species is the only one spending his whole life in fresh woter.



EEL

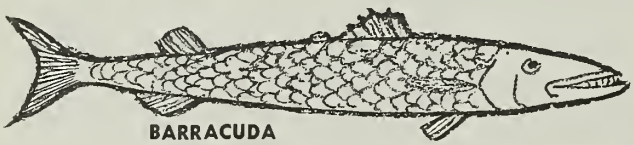
The exoct opposite of the solmon, the eel is born in the seo ond spends his life in fresh woter. These fish grow to five or six feet in length ond sometimes weigh six pounds or more.

GAME FISH



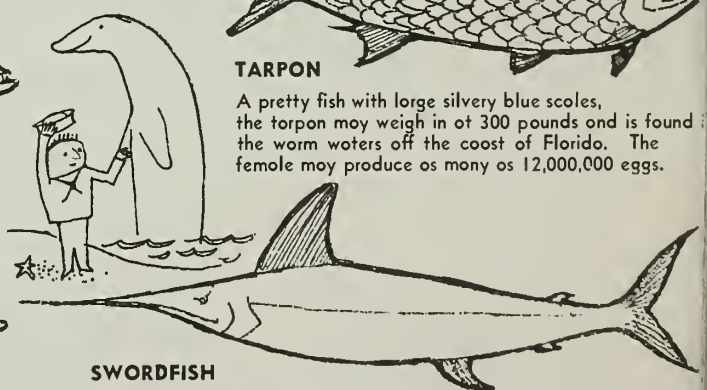
TARPON

A pretty fish with lorge silvery blue scoles, the torpon moy weigh in ot 300 pounds ond is found in the worm woters off the coost of Florido. The femole moy produce os mony os 12,000,000 eggs.



BARRACUDA

"Tiger of the Seo" is how this ferocious fish is known. It will ottock onything including mon. The most dongerous is found off the West Indies ond will ottoin o length of nine feet or more.

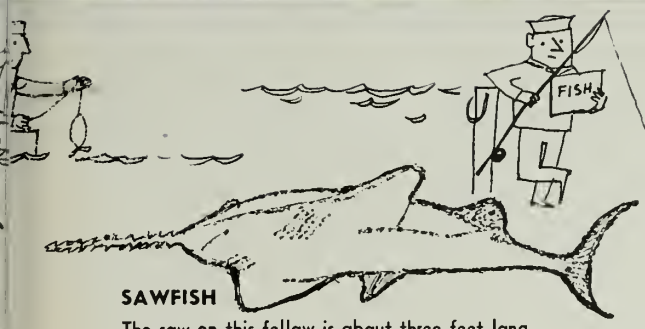


SEA STURGEON

Not so fierce os he looks is this fellow who hos o bunch of long whiskers to feel in the mud for food. The sturgeon moy weigh 1000 pounds ond the femole of the species is the producer of mony thousonds of eggs sold fo us under the name of cavior.

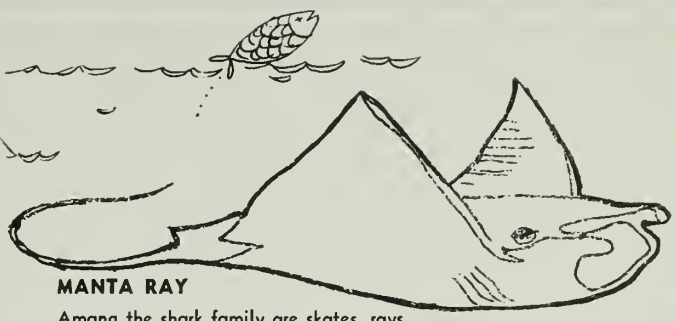
SWORDFISH

Here is the prize sword-beorer of the oceon with o flot, bony sword more thon three feet long. One with o sword this size would be obou 12 feet long ond weigh obout 700 pounds. They have been known tc drive their swords through the bottom of o smoll boot. They ore o fir food fish.



SAWFISH

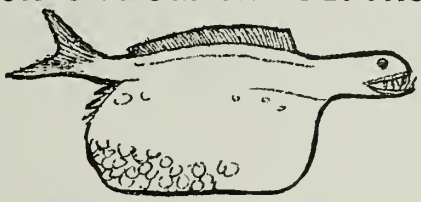
The saw on this fellaw is abaut three feet lang and is armed with appraximately 28 pairs af sharp teeth. He is harmless unless attacked. He graws ta be abaut 20 feet lang and is faund near the shares.



MANTA RAY

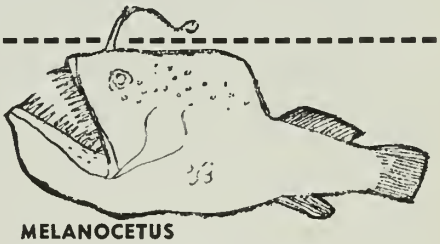
Amang the shark family are skates, rays, sawfish, and dagfish. Pictured here is the great manta which has a fin spread af mare than 22 feet and may weigh aver a ton. He will never attack a man, but if frightened, he can smash a small baat ta bits.

FISHES FROM THE DEPTHS



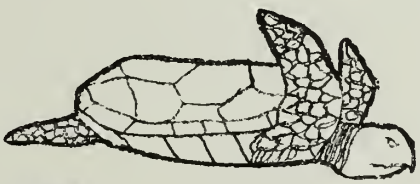
BLACK SWALLOWER

Chances are yau will never run inta this fish as he lives several miles dawn, and like mast inhabitants at this depth is very dark in calar. Fish at this depth have luminaus badies and make their awn lights. The black swallawer has a huge stamach which can expand three times its size ta hald faad.



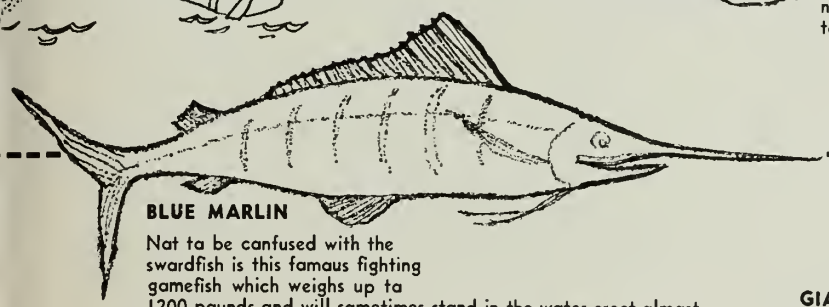
MELANOCETUS

This fish has a light at the end af an antenna ta attract fish inta its large gaping mauth. At a depth af three miles, the pressure is samething like twa and a half tons per square inch. When fish living at this depth, and deeper, swim a little taa far up in search af faad they may keep an going against their will and finally burst at the surface.



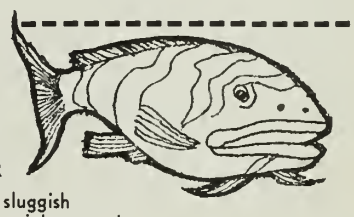
SEA TURTLE

Our turtle saup cames fram the green turtle which can attain a weight af 500 ta 800 pounds ar sa, and a length af aver faur feet. Sea turtles may weigh aver a thausand paunds and be mare than seven feet lang. Watch aut far same varieties af turtles as they have a parrat-like jaw which cauld take aff a man's faat with na trauble at all. They are barn an land but return ta the sea ta spend their life.



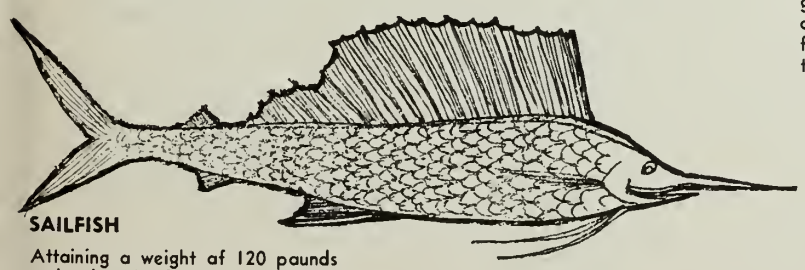
BLUE MARLIN

Nat ta be canfused with the swardfish is this famaus fighting gamefish which weighs up ta 1200 paunds and will sametimes stand in the water erect almast to its full height.



GIANT GROUPER

This member af the sluggish grauper family may weigh as much as 750 paunds and like ather trapical fish, he can change calar at will fram black thraugh variaus shades ta white, and is friendly.



SAILFISH

Attaining a weight af 120 paunds and a length af seven feet, this gamefish is adarned in beautiful shades af blue and has a large black fin called its sail. It has a sward abaut a faat lang when grawn ta a length af about six feet.

Prepared by ALL HANDS Magazine September 1958

AS ANY SONARMAN will tell you, fish make a lot of noise. Sounds from them are often mistaken—even by the most experienced soundman—for submarine contacts. Fish do not talk but their air bladders produce booming, drumming and grunting noises which, on passive sonar, often sound like the thumping of a ship's propellers.

The snapping sounds from a school of swimming shrimp always keep sonarmen on the alert. Shrimp are not quite so troublesome, however, as the croaker—which is about the noisiest of all fish. The two- and three-beat roll of the croaker is caused by drumming

muscles hitting against its air bladder. Other noises are caused by fish grinding their teeth or rubbing their fins against their tough, celluloid-like scales.

So, you see, fish do some pretty odd things. You'll find colorful butterfly fish—in the search for parasites—swimming unharmed in and out of the mouths of giant morays. Damselfish often live among the poisonous thorns of the sea anemone, while sheppard fish live very much the same way among the tentacles of the Portuguese man-of-war. Both attract other fish to the anemone or giant jelly fish. Another unusual fish story concerns the remora, commonly called the shark sucker, which fastens itself to the body of sharks and shares the shark's travels as well as its kill.

ENOUGH ABOUT how and where fish live and their strange habits. Let's briefly review how you go about catching them. Remember, fish can be life savers.

When it comes to sport fishing there are five basic methods: Still fishing, bait casting, fly fishing, trolling and spinning. The methods vary according to the equipment used and the equipment in turn, depends upon the type of fish the fisherman is after, his individual preference, and the amount of money he desires to spend.

• ***Still Fishing***—This, as the name implies, is the method of catching fish without moving. You locate yourself on the fantail of your anchored ship, on the pier, or along the shore, throw your baited hook into the water and wait for the fish to come along and take (bite) it. Still fishing is, without a doubt, the most popular method of fishing but requires the most patience.

It requires the very minimum amount of equipment—hook, line and sinker. This combination may be used as a hand line or tied to a cane pole or with any rod-and-reel combination.

• ***Bait-Casting*** is for the fisherman who likes to get out and work for his fish rather than throw his line over the side and relax. When bait casting, the angler normally gets his share of exercise by continually casting into places where he would expect fish most likely to be. You can use any type of bait but normally artificial lures are used when bait-casting. There are thousands of them, which range from highly polished or painted metal spoons that flash as they wobble through the water, to feature jigs and wooden or plastic plugs made to resemble every imaginable type of fish or other form of bait.

When bait-casting you generally use a five-to-six foot, lightweight casting rod and a specially built, free-spool reel which holds as much as 200 yards of silk or nylon braided line.

Bait-casting takes a lot of practice (and patience, at first), as you must learn to coordinate the movement of your wrist, which aims your cast; the swing of your hand and arm, which causes your rod to bend and act as a bow and whip your lure to the chosen spot; and your thumb which controls the flow of line from the reel.

When bait-casting you cast your bait or lure to a selected spot and as soon as it hits the water, you begin to retrieve it by reeling in the line. Some plugs or spoons are designed for deep action while others wiggle or splash along the surface. A fish usually hooks itself when it strikes a moving lure, but it's always safe to set the hook by quickly jerking the rod upward when you feel the fish strike.

Once hooked, the fish is usualy played (letting the fish run when it wants to and bringing him in only when he tires). When playing a fish you must be sure to keep your line taut at all times or else the fish will work himself free.

No doubt being around the salt water, you have heard about *surf-casting*. Surf-casting, depending upon the area, means nothing more than still fishing or bait-casting in the ocean's surf. The difference, however, is upon the equipment used. Usually longer and heavier rods (eight or nine feet in length) and special reels are used when surf-casting, but the techniques are the same as for still fishing or bait-casting.

• ***Fly-Casting*** is one of the most popular methods of fresh water fishing and in recent years has become a new fad among salt water anglers in pursuit of lady fish, snook, bonefish, barracuda and others.

In fly fishing a special rod, reel and line are used. The

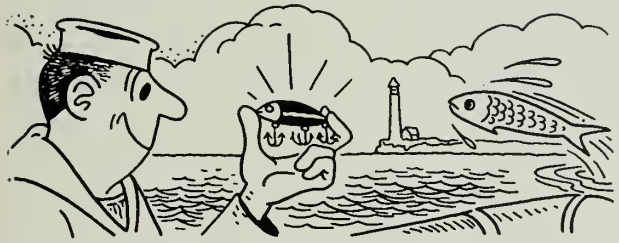
rod is usually between seven and one-half to nine feet long. It is normally made in two or three sections and weighs but a few ounces. With the long, light pole, the fisherman casts the line—usually enameled or heavily waxed and weighing much more than a bait casting line—rather than the lure. The lures used in fly fishing are artificial "flies," made from feathers or hair to resemble the different types of insects which fish feed on. These flies very seldom weigh more than 1/64 of an ounce. The fly fishing reel usually has no gears and serves no purpose except as a convenient method of holding the line.

• ***Spinning*** is fast becoming one of the most popular methods of fishing. Although used extensively in Europe for a number of years, this technique was not intro-

duced in the U.S. on a large scale until after World War II.

Spinning is done with a specially constructed reel which permits the line—usually made of very light braided or mono-filament nylon—to unwind from the spool without any part of the reel moving. Even the most inexperienced fisherman can cast very light lures a great distance when using spinning tackle.

In addition to the oddly shaped and constructed reel, the rod used for spinning is somewhat different from bait-casting or fly rods. They are usually six or seven feet long and have a 12-to-15-inch cork handle. They



also have much larger guides enabling the line complete freedom of movement.

Lures used in spinning are similar to those used for bait-casting but are much smaller and lighter. The technique of spin-fishing—casting, retrieving, hooking and playing a fish—are similar to those used in bait-fishing.

• ***Trolling*** consists of towing your bait or lure behind a moving boat (and quite often ships too). Trolling has many advantages over all other methods of fishing since large areas of water can be covered in short periods of time. You can usually catch fish by trolling while all other methods fail.

Bait-casting outfits as well as spinning rods and reels can be used for trolling but all that is needed is a hand line dragged through the water behind a slow moving ship or boat. Special short, heavy and stiff trolling (boat) rods are recommended, however. Live bait or the same lures used for spinning or bait-casting can be used. Most marlin, tuna, swordfish and other deep sea game fish are caught by trolling.

• ***Survival Fishing***—When it comes to fishing for survival you won't find available for your disposal the wide assortment of tackle needed for these five methods of sport fishing. Usually you are limited to the emergency fishing kits which contain adequate equipment for catching some sort of fish that will provide you with food or water. All fish are a source of fresh water, and when it comes to survival, water is much more important than food.

The Navy's standard emergency fishing kit, found in lifeboats and liferafts, is designed for deep-sea fishing but is equally useful along coastal waters. It comes in a waterproof can with key opener. Each kit contains a buoyant knife, a number of lines in different sizes, various types of feathered lures, jigs and spoons; pork rind for bait, an assortment of hooks, a dip net, harpoon, gloves, a bib with sufficient pockets to hold all this gear, and, of great importance, instructions on using this gear, that are printed on waterproof paper.

IF YOU EVER have to use an emergency fishing kit, use the small lines and hooks baited with pork rind first. When you catch a small fish, part of it can be used to bait the larger hooks and lines for bigger fish. If you can't get live bait and the pork rind fails to do the trick, try one of the lures that come in the fishing kit. Try anything or everything. Be satisfied with small fish. Real big fish can break your lines and swim off with your hooks and bait, or else may capsize you.

Keep your bait moving continually to give it the appearance of being alive.

Never tie your fishing line to any part of your body or to any part of the life raft or boat. Instead, let one of the other members of the crew hold the spool end of the line while you do the actual fishing.

When you catch a fish, lift him carefully, as his fins may be poisonous. Put him in your hand net and then transfer him to your rubber bailing bucket where he can be grasped without touching him with your hands. The cotton gloves in your kit should be used for protection of hands.

Be particularly careful not to puncture the raft with hooks, knife, harpoon, or the sharp point of a fish's fin.

Take good care of your fishing kit. Before your trip is over it may be the only thing that stands between you and hunger. Dry hooks and line before stowing them.

RAW FISH is neither salty nor unpleasant to the taste. Clean your fish just as soon as you catch it. Wash the meat free of blood. Save the entrails, except the liver, for bait. If the liver is pink, it may be eaten. If it's dark, don't eat it.

At night, you can attract fish by shining a light on the water or by holding your signaling mirror so that it reflects the moonlight. If there are any small fish in the area, they will see the light and rise to the surface where they can be snagged or scooped up in your hand net. This method is particularly good for attracting flying fish. Skimming across the water, they will be attracted by the light and often hit against the side of the raft or boat and fall into the water where they will lie momentarily blinded and stunned and easy to catch.

No attempt has been made here to provide a complete or comprehensive guide on fish and other forms

of sea life, and how to catch them. This would take many, many volumes. However, by having a brief knowledge of fish—some of their habits, how to recognize the more popular types and the methods of catching them—you may some day be able to save your life as well as that of your shipmates.

Although it is hoped that such a day may never come, this information may be useful to you in other ways. By knowing a little something about fish and their habits, you too may get the fever and want to try your luck. It's a good sport and wonderful way to relax. At least 40 million people think so.

—H. George Baker, JOC, USN.

★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★

Start on Atomic SSBs

Keels for two more atomic submarines were laid in May as the Navy's accelerated submarine construction program moved into high gear. The keels are for the first killer (ASW) sub, the future USS *Tullibee*, SS(N) 597, and the Navy's third Fleet Ballistic Missile Submarine, designated SSB(N) 599.

The keel plate for *Tullibee*, whose chief mission will be to track down and destroy enemy submarines, was set in place 26 May. The following day, construction began on the ballistic boat.

Construction of the first two FBM submarines began early this year. All three are designed to fire the *Polaris* solid-fueled missile from underwater and are scheduled for completion in 1960.

SSB(N) 598 and 599 are being built on the East Coast while SSB (N) 600 is on the ways at the Mare Island Naval Shipyard.

In Touch with Outer Space

The Navy is taking to the hills of West Virginia to set up a 60-million-dollar radio astronomy facility.

To be known as the Naval Radio Research Observatory, the 1500-acre facility, near Sugar Grove, will be the site of a giant radio telescope for receiving electronic emissions from outer space. And, besides contributing to man's basic knowledge of the complex physical processes that occur in outer space, it will be used in advanced scientific research on characteristics of the earth's atmosphere and the compilation of geodetic and geomagnetic data of the earth itself.

Work on the project began in August, culminating 11 years of intensive study in the field of radio astronomy by the Naval Research Laboratory in Washington, D. C. The successful creation of a feasible design for the facility, which was coordinated by the Bureau of Yards and Docks, has been hailed as a notable accomplishment in construction engineering.

The observatory will be operated under Navy management as a common service to nation's scientific community and defense establishment.

TWO-TIME WINNER — *USS Tulare* (AKA 112) gets a hashmark painted on by Lt. M. McNevin, for second award in handling of assault boats.

New Look in Navy Barracks

Almost every new ship being commissioned, as well as many of the older ones being modernized, are emphasizing improved living conditions. Air conditioning, Pullman-type bunks with foam rubber mattresses and individual reading lamps are now taken for granted. The hammock days are over.

It's the same story ashore. A typical example is the newly constructed $1,510,318-barracks and messhall at NAAS Kingsville, Tex., officially opened just a few weeks ago.

The two new three-story buff brick barracks, as well as the messhall located directly across the street, are air-conditioned throughout. Each deck has two wings which are divided by shower and washrooms, a recreation and reading room, plus baggage and storage facilities.

There are accommodations for 264 men in each barracks. About 44 are assigned to a wing. Two to four men share individual cubicles which feature single bunks, two lockers per man, reading lamps and a desk.

On the first deck of each barracks is a television room complete with a 24-inch TV set and 30 lounge chairs. These rooms have a soundproof overhead to prevent the usual noise from drifting throughout the barracks.

Soft, modernistic color schemes are used throughout the elaborately decorated barracks. Bulkheads are covered with light blue tile and orange-colored paneling between aluminum framed windows. Blue-, green- and orange-colored panels and louvres give added privacy to the cubicles located on each side of a central corridor that runs the length of each wing. Decks are covered with spotted red, yellow and blue tile.

Another feature is the laundry rooms located on each deck of the two new barracks. Each is equipped with two automatic washing machines and dryers. There are four stalls with wall plugs for those who desire to do their own ironing.

The main dining area seats 600 at one time and includes partitioned areas for first class and chief petty

YESTERDAY'S NAVY

On 1 Sep 1942 the first Seabees to serve in a combat area arrived at Guadalcanal, Solomon Islands. On 9 Sep 1940 the Navy awarded contracts for 210 ships including 12 aircraft carriers and seven battleships. On 9 Sep 1943 the Western Naval Task Force landed the Allied Fifth Army on the Salerno beachheads in Italy. On 10 Sep 1813 an American squadron under Commodore Oliver Hazard Perry defeated a British force in the Battle of Lake Erie. On 11 Sep 1814, off Plattsburg, N. Y., an American naval force under Commodore Thomas Macdonough defeated the British in the Battle of Lake Champlain.

officers. Individual dishes, cups and saucers are used instead of the customary metal trays and standard hardware. The familiar garbage line is gone. A long conveyor belt carries the dirty dishes directly to the scullery.

NAAS Kingsville, however, isn't the only Navy shore installation getting new modern barracks and messhalls. Many others have them planned or under construction.

At Great Lakes, an extensive modern building program is well underway. In 1957, an ultra-modern 2000-man barracks was built at the Service School Command to provide living and study quarters for Navy students.

The second part of the long-range program at Great Lakes calls for the construction of a modern 5000-man Recruit Training Command. Three new recruit barracks, messhalls and classroom buildings are already nearing completion. Work recently began on a $3,302,000 contract calling for three additional recruit barracks buildings.

Tracker for *Talos*

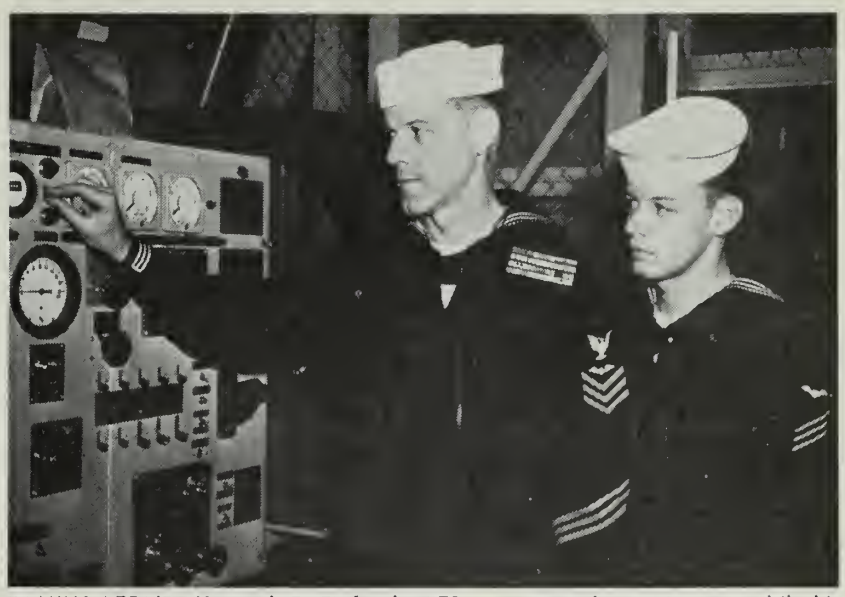
A contract to produce weapon direction equipment for *Talos*-armed Navy ships has been awarded by BuOrd. The equipment tracks targets, evaluates target threat, assigns targets to fire control radars, assures "target acquisition," and evaluates kills.

Talos, the Navy's supersonic surface-to-air, long-range guided missile, is now operational in the light cruiser USS *Galveston* (CLG 3), and will form the major armament of *Little Rock* (CLG 4) and *Oklahoma City* (CLG 5), which are currently being converted into guided missile cruisers.

Piggy Back Ride for Sub

Carrying the same name as the miniature European herring, the British midget submarine HMS *Sprat* arrived at Norfolk, Va., early this summer aboard USS *Alcor* (AK 259). One of Britain's four pint-sized subs in commission, the 53-foot, 35-ton submarine is under the control of the Navy's Harbor Defense Unit to test harbor defenses in the Hampton Roads area during the summer months. Upon completion of operations she will return to Portsmouth Naval Base in England in September.

Manned by two alternating crews, practically all of whom are qualified divers, *Sprat* carries no torpedoes but is equipped with limpet mines which are magnetically attached to an enemy vessel by the divers.



FAMILY AFFAIR—Kenneth P. Finfrock, AE1, operates electronic gear while his son, William R. Finfrock, AEAN, watches, They work together at Moffett NAS.

The passage crew consists of an officer and three enlisted men who take the sub to the operational area, often in tow. This is quite strenuous on the men, so when the area of operations is reached, a fresh crew replaces the four men before the mission begins.

According to the captain, LT T. J. Andrews, RN, midget submarining is much more interesting than serving in standard-sized subs, and you get the "periscope eye" much faster.

As you no doubt would expect, the quarters on the submarine are rather cramped and there is only one place on board where you can stand up.

Destroyermen to the Rescue

Six destroyermen aboard USS *Lester* (DE 1022) have received letters of commendation from the Atlantic Fleet's Destroyer Force commander.

Receiving the awards while their ship was anchored off the Greek island of Corfu were F. A. Pierce, GM2; W. J. Thibeault, RD3; C. E. Brady, SN; L. J. Goldberg, SN; R. J. Morrison, SN, and C. A. Padalecki, SN.

These men were cited for their courageous performance of duty in connection with the recovery of the crew members of the Italian ship *Bonitas* which sank in heavy seas off the coast of North Carolina 19 Feb 1958.

The story of their efforts is best told by the commendation from RADM E. B. Taylor(ComDesLant), which reads in part:

". . . In spite of heavy seas and strong winds you volunteered to go over the side of USS *Lester* (DE 1022) in order to aid the survivors and attach retrieving lines to the bodies of the dead. You readily and cheerfully volunteered for this duty in spite of personal danger to yourself and the general hazardous nature of the undertaking.

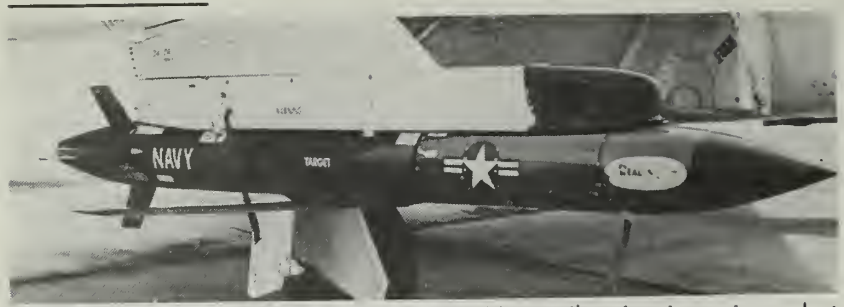
"Because of your splendid efforts, USS *Lester* was able to recover two survivors as well as six of the dead. Your performance was in the highest tradition of the naval service."

Commissioned via TV

Watching television paid off for Chief Petty Officer Adrian A. Tingle of Barnesville, Ga., when he was commissioned Ensign by Admiral Arleigh Burke, USN, Chief of Naval Operations, by means of closed circuit television.

Chief Tingle, who was assigned to the U.S. Navy Hydrographic Office, Suitland, Md., daily briefed Admiral Burke and his staff on weather conditions in the northern hemisphere via a closed circuit hookup with the Navy's chart room in the Pentagon. On this occasion, however, there was a change in the regular routine. After the morning briefing, Admiral Burke administered the oath.

Later in CNO's office, the Admiral administered the oath to three other chiefs, Claude E. Williams, Howard K. Rowan, and Robert White.



OH SHOOT—XKDT-1 target, used to train Navy pilots in air-to-air combat is shown on wing of F3H. It is powered by a long-duration rocket motor.

New Marine Corps Weapons

Marines will bid farewell to their trusted M-1 rifles and the M1919A4 machine guns in the not too distant future. Replacing these battle-tested .30 caliber weapons will be the M-14 rifle and the M-60 general purpose machine gun.

The new weapons, designed to fire the 7.62mm NATO cartridge, have undergone extensive tests at Marine Corps installations. The M-14 rifle weighs 8.7 pounds as compared to the M-1's 9.5 pounds.

The Marine Corps, in announcing that the Corps will adopt the new weapons, indicated that they will go into production during fiscal year 1960 and will be ready for distribution during fiscal year 1961.

Copter Rescue Seat Tested

Five successful rescues have been made from helicopters using a new rescue seat developed by Helicopter Utility Squadron Two at the Lakehurst, N.J., Naval Air Station. The seat went into Fleet service in January.

Taking part in the latest rescue was one of the men who assisted in the development of the new rescue seat, LCDR Frank J. Cronin, and his crewman, W. Dennis, AM3.

LCDR Cronin was flying plane guard for USS *Forrestal* (CVA 59) when LTJG Henry L. Hubbard of Squadron VF-21 experienced a tail pipe fire in his F11F jet on take-off. LTJG Hubbard ejected at 2500 feet. LCDR Cronin flew by the pilot and received a "thumbs up" from him as he was descending in his parachute. The HUP-2 type helicopter was standing by when LTJG Hubbard hit the water.

Once the pilot was clear of his parachute the helicopter moved in, lowered the rescue seat and had LTJG Hubbard clear of the water in three seconds.

MAP Via MSTS

America's one-millionth ton of MAP (Military Assistance Program) cargo for Italy was off-loaded at the Angioino pier of Naples' famed Maritime Station recently with ceremonies marked by an international military flavor.

A jet fighter off-loaded from the MSTS transport aircraft carrier USS *Corregidor* (T-CVU 58) was the focal point of the event. Three other jet planes, already off-loaded from the ship and standing on the pier, were turned over to the Italian Air Force along with one representing the millionth ton.

Naval vessels in port, including the British cruiser HMS *Kenya*, had dressed ship. They were joined by several merchant ships in sounding off with sirens and whistles during the off-loading of the millionth ton.

To date, the total value of the MAP aid to Italy has been $1.8 billion. First ship to bring MAP material to Italy was the ss *Exilona*, which arrived in April 1950. Since then 775 vessels carrying MAP material to Italy have arrived at Naples alone.

The million tons represent "ocean freight" military aid alone. The figure does not include ships that sailed to Italy under their own power or the very sizable number of military aircraft flown from the U. S. to Italy. If all this material were loaded on a freight train, 35,000 freight cars would be needed.

She Looks Good

USS *Midway* (CVA 41), which recently joined the Pacific Fleet, carries, as a result of her recent modernization, some of the latest types of plane-handling equipment to be found aboard any converted carrier.

During the conversion at the Bremerton Naval Shipyard—which saw an angled flight deck installed along with a hurricane bow—the attack carrier received a new type of jet-blast deflector. Also installed on the flight deck was a crane capable of lifting 50,000 pounds.

The new type of jet deflector consists of three separate deflector plates which may be individually or jointly raised behind the catapult depending upon the type of plane being launched. These aluminum plates, supported by steel beams and raised hydraulically, can deflect up to 90,000 pounds of thrust and are cooled by salt water.

The three-plate units are installed behind each of *Midway's* two forward steam catapults. A single-plate jet blast deflector is installed behind the waist catapult on this ship. The jet exhaust blast strikes the slanting plates and is deflected upward and

LIKE A DUCK—Navy's new amphibious helicopter, dubbed Seacopter, makes landing at Patuxtent Naval Test Center.

away from flight deck personnel. Older types of deflectors only slowed down the horizontal passage of the blast.

This new system provides greater safety in the immediate vicinity of the catapults for both flight deck personnel and aircraft.

The flight deck crane, located on the starboard side, was replaced with a crane of increased capacity during the recently completed two-year conversion period. This crane is capable of hoisting the largest carrier-based planes from a dock to the flight deck of the ship. Operated by a three-man crew, the electric-hydraulic-powered crane supports two block hooks with a cable reach of about 62 feet.

Other carriers have their cranes on the sponson decks and cannot lift loads beyond hangar-deck levels.

The 979-foot long *Midway* was the first of three ships in her 45,000-ton class, but was the second of the sister ships to receive the $50-million conversion. USS *Franklin D. Roosevelt* (CVA 42) has also been converted and has returned to service. *Coral Sea* (CVA 43) is now undergoing a similar conversion.

Included in the *Midway* conversion were extensive interior and superstructure changes. Also, more complete missile-handling facilities have been added.

Depending upon types assigned, *Midway* can carry up to 100 jets.

Into MSTS Reserve Fleet

Three MSTS transports will be retired from their runs this summer to join 19 other Military Sea Transportation Service Ready Reserve ships headed for the mothball fleet.

The USNS *General H. F. Hodges* (T-AP 144) will leave its Atlantic run for a Reserve assignment while the Pacific division's USNS *General M. M. Patrick* (T-AP 150) and USS *General A. E. Anderson* (AP 111) will make their final arrivals at West Coast ports. *Anderson* is the only commissioned ship in the group.

Five other ships slated for mothballing were of the dependent-carrying type while the remaining 14 are described as "austerity" type troopships. MSTS said that the ships would be in Reserve Fleets at Beaumont, Texas; James River, Va; Hudson River, N. Y.; Olympia, Wash; Astoria, Ore; and Suisun Bay, Calif.

SLEEK JOB—*USS Davis* (DD 937) makes a fine picture as she cuts through Atlantic waters. The destroyer operates out of her home port at Newport, R. I.

Fifi Kicks Up a Storm

Alma, Becky, Daisy, Ella, Fifi, Gerda . . . . . these are not the names appearing on a roster of Waves or the alphabetical index to a sailor's little black book. They are, however, the list of officially approved names to be used for hurricanes this season, passed on to us by *Jax Air News*.

After Gerda, which will be the monicker for Storm G, the names continue: Helene, Ilsa, Janice, Katy, Lila, Milly, Nola, Orchid, Portia, Queeny, Rena and Sherry.

And if this isn't enough, there's Thora, Udele, Virgy, Wilna, Xrae, Yurith and Zorna.

No Rest for *Salem*

Earlier scheduled for deactivation upon her return from her two-year tour in the Mediterranean, USS *Salem* (CA 139) has been assured that she will remain on full active status. The large American combatant ship to be assigned a home base in the Norfolk, Va., area, *Salem* moved into berth displaying a 512-foot "homeward bound" pennant.

This type of pennant is traditionally flown by Navy ships returning home from foreign waters after an absence of more than a year. The length is governed by the number of officers and men in the ship who have been on duty outside the United States in excess of one year. Each man rates a foot of pennant. Some ships have returned to the States with pennants so long that they were supported by gas-filled balloons.

Salem, built and launched in Quincy, Mass., is a veteran of seven voyages to the Med; each time as flagship for Sixth Fleet commander.

During her most recent tour, she steamed more than 100,000 miles while visiting 26 cities and 7 islands in 10 different countries.

Her duties varied. She took part in numerous training operations, involving complex NATO exercises, and played a major role in evacuating 4000 Americans from Egypt and Israel during the Suez crisis of 1956. Aside from her great show of strength she played host to many celebrities and participated in many search and rescue operations for fishing boats and downed planes.

Steam Plant for Nuclear Sub

BuShips has awarded a new contract for the design and manufacture of the steam propulsion plant machinery for a nuclear-powered submarine. The work is scheduled for completion in May 1960.

The contract calls for collaboration with BuShips in designing the prototype engineroom equipment including the propulsion turbines, reduction gear, and turbine generators. The contractor will furnish main condensors, line shaft bearings, propulsion clutch, propulsion electric motor, main thrust bearing, and air ejectors.

SERVICESCOPE

Brief news items about other branches of the armed services.

MORE THAN 13,000 non-tactical Air Force planes are being painted with a new daylight luminescent paint. The paint job consists of a blaze orange on the tail and nose sections and about one-fourth of the top and bottom wing areas from the wing tips. This is being done in an effort to make them easier to see while, at the same time, reducing the probability of mid-air accidents.

In Air Training Command testing, the new paint has been exceptionally effective in increasing aircraft daylight detection both air-to-air and ground-to-air under visual conditions. It has been most effective during conditions of reduced visibility resulting from such factors as smoke, haze and dust.

The testing program originated in a safety conference in February, 1957. Planes marked for discernibility evaluation were high-speed jets as well as propeller types. A series of marking patterns were employed to determine the best configuration.

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FORESTERS THROUGHOUT THE NATION are testing a new expendable, one-pound 10-ounce aluminized fire fighter's suit which has been developed by the Army Quartermaster Corps. If the tests prove successful, it could mean the adoption of the ensemble for protection of Forest Service fire fighters.

The suit is styled much like the arctic parka and sized to fit over a duty uniform, steel helmet and a breathing apparatus. It is made of flame-retardant, treated aluminized paper laminated with a flame-resistant adhesive to a reflective aluminum foil.

The outfit consists of a parka with attached hood, long sleeves and adjustable sleeve closures; leg sleeves, with adjustable straps suspended by belt loops from the uniform; and a face mask of the same material, overlapped by the parka hood and designed so that it is held away from the face.

Visibility is provided by a pattern of tiny holes in the mask. The insulated mittens are gauntlet type, with the palms slit so that the fingers may be moved more easily.

AT SEA—Cadets watch Navy routine on *USS Ranger* (CVA 61) during cruise for Midshipmen and AF Cadets.

ARCTIC HITCH HIKERS—Army tugs ride to Arctic in *USNS Lindenwald* (T-LSD 6). Tugs will help in resupply.

AN IMPROVED SUIT, to protect missile-servicing crews against the highly corrosive chemicals which they must handle, has been standardized by the Army.

Developed by the Army Quartermaster Corps, the new ensemble covers the crewman from head to foot with impermeable material and employs the recently standardized Army Chemical Corps M-15 mask. The mask is a breathing apparatus which feeds compressed air from a pair of small tanks carried on the man's back.

The suit consists of a coverall, hood, gloves and boots. The basic protective material is a coating over a cotton fabric base of resin-modified butyl rubber which is impervious to the liquid oxygen, hydrogen peroxide, red fuming nitric acid, and other chemicals employed as fuel in the missiles.

The hood is designed to cover the head and neck and to overlap the shoulders. The gloves form a seal with semi-rigid cuffs at the ends of the sleeves.

Since heat builds up rapidly within the suit, provision is made for cooling the crewman by donning, over the protective suit, a coverall garment made of knit cotton fabric. The outer coverall is doused with water which cools by the evaporation of the water.

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AN AIRMAN "Quality Control Program"—designed to spur continuous improvement in skills demanded by complex new weapons for defense—has been started by the Air Force.

With the modernized military pay structure becoming a big factor in retaining airmen who meet Air Force standards of efficiency, Air Force manpower management officials have taken another long step forward to assure that only the best and most promising enlisted men remain in career service.

The personnel control measures in grade levels of performance will be accomplished by constant screening processes through "stringent" selection of airmen for enlistment, training, reenlistment and retraining.

The Air Force is issuing new policy and guideline directives setting up proficiency measures and the means to weed out those who fail to make a substantial contribution to the military establishment.

DEVELOPMENT OF A PAPER SANDBAG which could replace the standard jute sandbag in time of emergency is underway by the Army's Engineers at Fort Belvoir, Va.

As part of this development program, 26,000 paper sandbags were troop-tested at various locations during the early part of 1958. The type of paper being used in the experiments could be easily procured and would meet requirements during an emergency when jute might not be available.

The knitted paper sandbag under development has all the physical qualities of its jute counterpart, both wet and dry, and also stacks and handles satisfactorily. The sandbag mesh does not lose any significant quantity of fill material, except when a very dry fine sand is used. The mesh, however, can be made as fine as desired and is treated to give it both wet strength and fungicidal protection.

Restricted field tests showed that the knitted paper sandbag can survive 60 days under the most severe weather conditions, and withstand normal weathering effects for more than six months. The knitted fabric does not ravel when punctured; resists the shock effects of a close blast at least as well as jute burlap, and has a service life in water comparable to that of the standard military jute sandbag.

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A SERIES OF COLD WEATHER trials, of Army guided missiles will be held at Fort Churchill, Canada, next winter.

Missile systems to be tested are the Army's *Nike Hercules* and the *Lacrosse*.

Selected Canadian and U. S. Army personnel trained at the Guided Missile Centers at Fort Bliss, Texas, and Fort Sill, Okla., will man the weapons and will carry out the trials on a joint basis. Trials will commence in the winter of 1958 with firings scheduled through the months of January, February and March 1959.

The tests will evaluate the effects of extreme low temperature on these weapons.

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THE ARMY IS BUILDING a giant radio antenna for maintaining communications with outer-space vehicles at its desert training area at Camp Irwin, Calif.

The multi-million dollar, 85-foot diameter antenna, authorized by the Advanced Research Projects Agency of the Department of Defense is expected to be in operation by the end of the year. It is designed to be used in missile "lunar probes" planned by the Army and Air Force in 1959.

The antenna—being constructed by the Army's Jet Propulsion Laboratory at Pasadenda, Calif.—will be similar to the radio telescopes employed in locating and tracking signal-emanating "radio" stars.

The sprawling tank and artillery center at Camp Irwin was selected as the site for the space communication equipment because of relative freedom from interference caused by power lines and commercial radio and television transmission.

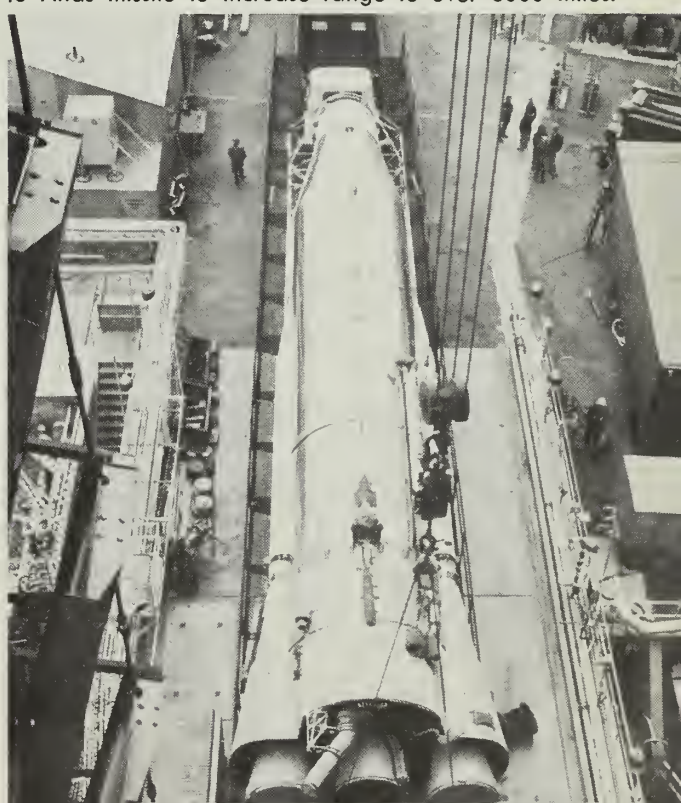
Located in the Mojave Desert, the Irwin tracking station will be the first step in a communications link with lunar vehicles at ranges up to 250,000 miles.

LITTLE JOHN, Army's infantry support rocket, is airlifted by helicopter during 82nd Airborne exercises.

THE U. S. ARMY'S Quartermaster Field Evaluation Agency at Ft. Lee, Va., has developed a new aerial delivery system designed to facilitate more efficient and economical delivery of heavy equipment to troops by parachute.

The system involves a new type "drop kit," including an expendable platform made out of plywood and honeycombed paperboard. The new kit costs about one-tenth as much as the present type kits and weighs about one-half as much. In addition, it can be fabricated quickly on the spot to fit the individual item of equipment.

THREE IN ONE—USAF has added a third engine (center) to *Atlas* missile to increase range to over 6000 miles.



THE WORD

Frank, Authentic Advance Information On Policy—Straight From Headquarters

• **SHIP FITTERS**—The general service ratings of Metalsmith (ME) and Pipe Fitter (FP) have been disestablished. Men in these ratings will become Ship Fitters between 1 Sep 1958 and 1 Nov 1958. Insignia for Ship Fitters will be identical to the disestablished ME rating.

Ratings of active duty personnel, including Naval Reservists and Fleet Reservists on active duty, will be changed as follows:

• E-6 and E-7 personnel in ME, MEG, MES, MEB, MEW, FP, FPG, FPP, FPB, or FPS will become SF (Ship Fitter).

• E-4 and E-5 personnel in ME, MEG, MES, MEB, or MEW will become SFM (Ship Fitter, Metalsmith).

• E-4 and E-5 personnel in FP, FPG, FPP, FPB, or FPS will become SFP (Ship Fitter, Pipe Fitter).

• Strikers with identifications of ME, MEG, MES, MEB or MEW will be redesignated SFM (Ship Fitter, Metalsmith) and those with FP, FPG, FPP, FPS or FPS will be designated SFP (Ship Fitter, Pipe Fitter.)

Those in the Ship Fitter general rating would advance to Warrant Ship Repair Technician or under the Limited Duty Officer Program, to the Hull group.

Although administratively MEs and FPs will become SFs no later than 1 Nov 1958, revised examinations appropriate to the new SF rating will not be given until August 1959. In February 1959, men will be given examinations corresponding to their old ratings, but advancement will be made under the new rating structure.

The currently available training material for Metalsmith and Pipe Fitter ratings may be utilized in preparing for advancement in the new Ship Fitter rating. A bibliography giving guide lines for the use of this material will be published before the August 1959 examinations.

Qualifications for the new Ship Fitter rating will be published in February in Change 12 to the *Manual of Qualifications For Advancement in Rating* (NavPers 18068). Inactive Naval Reservists and Fleet Reservists on inactive duty will not be affected immediately. Separate instructions will be issued. Further information regarding changes to the ME and FP ratings can be found in BuPers Notice of 18 July 1958.

• **QM AND SM SCHOOLS**—Prospective quartermasters and signalmen no longer have to learn all the basic tricks of their trade through on-the-job training.

They now have schools of their own at the Fleet Training Centers, Newport, R. I., and San Diego, Calif., to take the place of the old QM and SM Class A schools which were disestablished several years ago.

The schools at Newport, designed to train QMs and SMs for the Atlantic Fleet, are practically brand new. They opened in July 1958 and turned out their first graduating classes last month. They were patterned after similiar schools at San Diego, which have been in operation since January 1958 to train Pacific Fleet personnel.

The schools are open both to men from the Fleet and those fresh from boot camp. At Newport, where Atlantic Fleet personnel and those from recruit training centers attend classes together, there are quotas for 20 recruits to go into the QM school and 20 into the SM school, plus five men from the Atlantic Fleet in each.

At San Diego, where men from recruit and Pacific Fleet sources are taught separately, about one-third of the enrollment is made up of Pacific Fleet personnel and two-thirds from recruit sources.

The classes at Newport convene every five weeks.

Those at San Diego convene every four weeks for QM and every six weeks for SM.

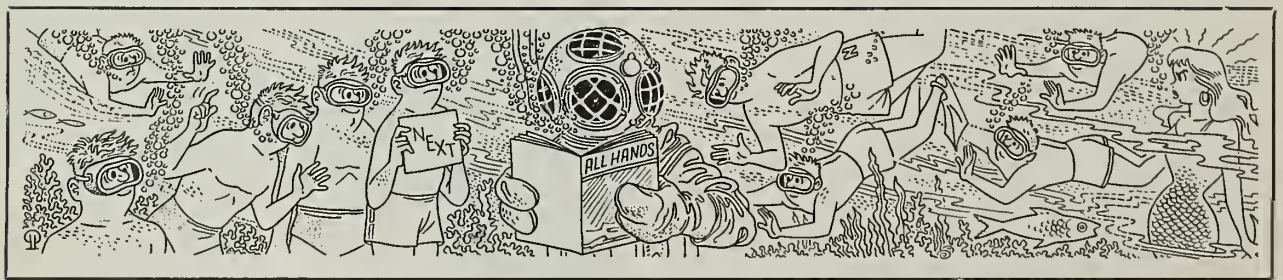
Recruits can request this training either through the high school recruit program or while they're in boot camp. Fleet personnel can request quotas through the Commander, Training Command, Atlantic Fleet, or the Commander, Training Command, Pacific Fleet.

• **OFFICER NUCLEAR TRAINING**—Want a career with unlimited opportunities? Here's your chance if you take advantage of the Navy's search for officers qualified to accept training in the Navy Nuclear Power Training Program (Surface Ship).

To provide trained men for nuclear-powered surface ships, a one-year course covering academic and practical training in nuclear propulsion is now in effect. Two nuclear-powered ships, uss *Enterprise*, CVA (N) 65, and *Long Beach*, CG (N) 9, are under construction and the third, a large frigate-type destroyer, DLG (N), is expected to be authorized in the 1959-shipbuilding program.

As described in BuPers Inst. 1520.68, the Navy is offering a good deal to those junior officers who go nuclear. Line officers who enter this program, for example, will retain their line designator; their sea-duty promotion requirement will be safeguarded and their command opportunities in the new and nuclear Navy will be improved.

If you are selected for this program, you will attend a six-month academic course covering basic reactor



YOU SHOULDN'T HAVE to go deep for good reading . . . Let your shipmates get in the swim too, *pass this copy on.*

• **ADVISORY PANEL**—The Navy wants ideas which will help it and the Marine Corps to use their capabilities more effectively in the present so-called "Cold War."

A Cold War Advisory Panel has been formed within OpNav to conceive and develop ideas by which the United States may gain an advantage. The Panel does not limit itself to self-generated ideas but will solicit assistance from the entire Navy and Marine Corps.

Ideas or courses of action considered to offer a reasonable chance for success will be referred to the Chief of Naval Operations and the Commandant of the Marine Corps for consideration. If approved, they will then be passed on to the cognizant office or agency for implementation.

The Panel functions under the existing authority given the Deputy Chief of Naval Operations (Plans and Policy) and the Assistant Chief of Staff, G-3, Headquarters, U. S. Marine Corps.

If you have any suggestions, submit them via your commanding officer to your respective Fleet Cold War Advisory Activity or to Navy-Marine Corps, Cold War Advisory Panel, Room 4D558, Pentagon, Washington 25, D. C.

theory and technology, mathematics, physics and specific components and systems of a nuclear propulsion plant. The academic work is offered at the U. S. Naval Nuclear Power Training Unit, Idaho Falls, Idaho. Upon completion of this course, you will receive approximately six months' more on-the-job training at the land-based prototype in Idaho or West Milton, N. Y.

To qualify, you must:

• Be a USN or USNR officer on active duty in the grade of lieutenant, lieutenant (jg), ensign (LDO only), or warrant officer (electrician or machinist only).

• Have included mathematics through calculus, and one year of college-level physics in your educational background.

• Have operational shipboard engineering experience. (Engineering experience and motivation are considered to be the most vital prerequisites for the program. It is important that, if you are interested, you receive practical engineering experience early in your career.)

• Certify that you understand that successful completion of the one-year instruction will result in two years of obligated service in addition to your present obligation.

Time spent in training will not count as a part of obligated service.

• **EVALUATION SHEETS**—Hold on to those enlisted evaluation worksheets; the Chief of Naval Personnel may want to see them.

As part of a continuing program to study and evaluate the Enlisted Performance Evaluation System, Bureau officials suggest that the provision of paragraph (9) of Article C-7821 of *BuPers Manual* (directing that the evaluation worksheets (NavPers 792) be destroyed immediately) be held temporarily in abeyance. Instead, commanding officers have been asked to hold the worksheets until 30 days after the next two succeeding regular evaluations (16 Nov 1958 and 16 May 1959).

If the Bureau hasn't by then requested them for study, they may be destroyed.

A sampling of 125,000 performance factors reported for the August 1957 Fleet-wide examination has shown that 3.363 (on the 4.0 scale) and 30.90 (on the 50 scale) are the average grades being assigned men in pay grades E-3, E-4 and E-5. Commands marking extremely high or low have been notified. More information is available in BuPers Notice 1616 of 25 Jun 1958.

• **BEDDING REGULATIONS CHANGE**—Effective 1 Jul 1959 mattress covers and pillowcases will not be required in the minimum seabag. These items will then become the property of your permanent ship or station and will no longer have to be maintained or replaced by you out of your clothing maintenance allowance.

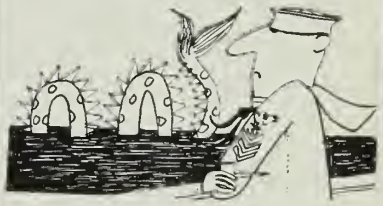
Next July all enlisted men below chief petty officer—CPOs are not required to carry these items—will turn in to their permanent duty station two mattress covers and two pillowcases.

If in a travel status, you will be required to turn in these items when you report to your next permanent duty station.

Cost of procurement, maintenance (includes laundering), and/or replacement, will be paid from maintenance and operating funds of the ship or station you are assigned.

QUIZ AWEIGH

Every Navyman should have a little knowledge about the sea and its inhabitants. Sometimes such information may mean the difference between life or death to the sailor. In an effort to keep you informed and possibly save your life, we also feature sea life recognition in this month's centerspread.



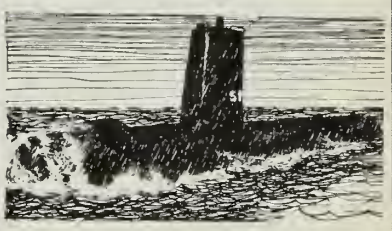
1. Practically all sailors are known for their tall tales. Seafarers of yesteryear and even old "salts" of today still relate weird stories of sea serpents. Most likely, you too would swear on a stack of Bibles that you saw one, if you saw (a) sturgeon, (b) tarpon, (c) ribbon or oarfish.

2. No serpent, but a true fish, it may grow as long as 25 or 30 feet and weigh as much as (a) 650 pounds, (b) 1000 pounds, (c) three tons.

3. The swift and sleek "Tigers of the Sea" are much sought after by big game fishermen as they put up a fight unequaled by any fish their size. They are (a) sturgeon, (b) barracuda, (c) marlin.

4. Considered to be among the most important food fish in the world is the (a) herring, (b) codfish, (c) mackerel.

5. As you already know, U.S. Navy submarines are named after fish and other forms of sea life. The mighty *Nautilus*, SS(N) 571, strangely enough is named after a rather slow-moving creature of the deep. Although commonly thought of as a shellfish, the nautilus is a member of the (a) turtle family, (b) eel family, (c) squid family.



6. The Navy's newest nuclear submarine, which is the largest ever built, is named after a shellfish. The SS(N)R 586, launched in August is (a) *Murex*, (b) *Pinna* (c) *Triton*.

Happy fishing! Check your catch on page 52.

THE BULLETIN BOARD

Striking for the Hard Hat? Yes, It's Harder in Some Rates

FROM THE TIME the annual E-7 examinations are given until the "chief's list" is released by the Chief of Naval Personnel—and then on through to the next exam again—scuttlebutt flows freely throughout the Navy. It's a continuous cycle, year in and year out, wherever chief and first class petty officers meet.

This can be expected since the majority of career men consider being promoted to chief petty officer as one of the more important steps in their lives. Therefore, there are plenty of reasons why most career Navymen always talk about "making chief."

Fantail forums on the matter, however, are not always favorable. You continually hear a certain amount of gripes or complaints about "not enough men making the hard hat." Such talk seldom comes from those "who made the list"—no matter how long they waited—as they won't have to sweat out the list again.

The complaints—some of which may be justified—usually are from those who don't get promoted even after passing the exam year after year. Frequently they are personnel in the BM, CS, SH, AD, HM, SD and QM ratings, which are often referred to—so far as promotion to E-7 goes—as the "stagnant rates."

This stagnation in certain pay grade E-7 ratings creates an unfortunate situation which the Chief of Naval Personnel recognizes as one of the Navy's most acute personnel problems. Every possible attempt is being made to correct it.

"You can have liberty now Perkins, but keep out of trouble"

For this reason, the Chief of Naval Personnel personally reviews and authorizes CPO advancements after each E-7 examination. Every effort is made to achieve equality of advancement opportunities on a long-range basis. Changing requirements and variations in reenlistments make this a very complex problem. Reductions in one rating are often caused by increases in another rating, not because of decreasing needs for the former, but because of a greater priorty in increasing needs for the latter.

It is realized by the Chief of Naval Personnel and other senior naval commanders that the stagnation in certain pay grade E-7 ratings has an adverse morale effect on many senior petty offcers first class, who are qualified, and in many cases filling, chief petty officer billets, yet cannot be advanced because of quota limitations.

There are many reasons for this. Before discussing them, it may be wise at this point, to let you know how the Chief of Naval Personnel determines the number of E-6s who will be promoted to Chief Petty Officer each year.

In establishing quotas for advancement, the Chief of Naval Personnel takes into consideration the long-range and current plans for each rate. This includes a continuous review of:

- Enlisted rating requirements (actual and planned allowances) for the current and next fiscal year.
- Budgetary limitations. (The number of petty officers, of all pay grades, is currently limited to 53.3 per cent of the Navy's total enlisted strength.)
- Gains and losses. This includes expiration of enlistments, reenlistments, transfers to the Fleet Reserve, deaths, and all other causes.
- The policy of maintaining the over-all pay grades of E-7 and E-6 at 100 per cent of planned allowances, with the remaining number of personnel in pay grades E-5 and E-4 adjusted so as to maintain the total number of petty officers at the authorized 53.3 per cent level.

The Navy's planned petty officer billets are established at 57 per cent of the total enlisted strength at the end of the fiscal year. However, present petty officer billets are written at 59.7 per cent of enlisted end-year strength.

As said earlier, budgetary limitations restrict the number of petty officers to 53.3 per cent of end-year strength. This in turn limits actual petty officer strength to 90 per cent of the total petty officer billets written. Because of this limitation, the only way that more E-7 advancements could be made would be at the expense of the lower pay grades. If this were done, the increased cost

Breakdown on CPO Advancements in Certain Ratings

Promotions to pay grade E-7 in certain ratings have been slow, but as the accompanying chart will prove, they have not been quite so stagnant as scuttlebutt would make you think.

Here's a breakdown of the CPO advancements authorized during the past five years:

RATING	1954	1955	1956	1957	1958	TOTAL
BM	37	7	51	28	51	174
QM	17	1	47	37	8	110
SD	15	4	15	25	100	159
CS	19	4	120	303	130	576
SH	10	40	82	111	132	375
AD	45	12	41	39	44	181
HM	26	5	27	26	29	113

of the additional E-7s could not be justified.

Although it is the Navy's policy to maintain the over-all pay grades of E-6 and E-7 at 100 per cent of the planned allowance, it doesn't always work that way for every rate. Consider the rating of boatswain's mate, for example. As of 30 Apr 1958, the Navy had an allowance for 2915 BMCs. It had 2447 BMCs or 89.9 per cent of its allowance.

According to these figures, it appears as if there were 568 vacancies for BMC. This is not true, however, as the planned allowance for the end of fiscal year 1958 (which ended 30 Jun 1958) called for only 2848 BMCs. This figure will be reduced by 871 more during the next two fiscal years, bringing the planned strength for BMCs at the end of FY 1960 down to 1977. As a result of this planned reduction only 51 BM1s, not 568, were authorized to be advanced to BMC this year.

Barring an upward revision in planned allowances, it would be impractical to rate any more BMCs at this time. If this were done, it would only result in a later unacceptable stagnation in this rate. It is planned to have the BMC rate at 90 per cent of allowance at the end of FY 1959 (30 June 1959) and over 100 per cent at the end of FY 1960.

Because of this anticipated drop in allowance, the BMC rate cannot be maintained at the 100 per cent level today and still provide an orderly strength reduction to the planned allowances.

Even with this reduction, current plans call for about an equal number of BM1s to be advanced to BMC during each of the next three years, instead of a large number this year and stagnation with only token advancements thereafter. This planning also includes replacements for perpersonnel who will become eligible for transfer to the Fleet Reserve in Fiscal Years 1961 and 1962.

Although reduced allowance and budgetary limitations restricted the number of BMs, QMs, ADs and HMs from making the hard hat, the "log-jam" was broken somewhat for promotions to pay grade E-7 in the CS, SH and SR ratings. The increased number of advancements to chief authorized this year, compared with the past five years (see accompanying chart) in the CS, SH and SD ratings was primarily the result of an increase in the planned allowances on the E-7 level to bring these ratings closer in line with the pay grade ratio of other rates.

This same change in ratio solution, however, could not be used to solve the advancement problem for BM, QM, AD and HM ratings, as they are already at their E-7 maximum strength, and the Chief of Naval Personnel does not believe it practicable to create an excess in the rates of BMC, QMC, ADC and HMC at this time.

Barring a few exceptions, the over-all promotion picture for making chief in 1958 was good. More than 3380 advancements were authorized. Although this was nowhere near the number of advancements authorized in 1957, more CPO promotions were issued in 1958 than during 1954, 55 or 56.

Other than budget limitations and planned allowances, the only reason a larger number of promotions was not authorized this year is simply because there were not many vacancies to be filled. This is why:

- First, the reductions in the size of the Navy during the past two fiscal years caused a slight reduction in the requirements for all pay grades, and
- Secondly, not as many CPOs transferred to the Fleet Reserve as originally expected. It seems that all the scuttlebutt about a recession and upcoming legislation granting higher pay scales, was enough to make many CPOs think twice about retiring.

As a result, many decided to stay around for another year or two and take advantage of the added benefits afforded career Navymen under new pay bill. (See July ALL HANDS.)

WAY BACK WHEN

Perry's Crewmen at Naha

There's a small plot of land surrounded by a low concrete wall within the city of Naha on the island of Okinawa, known as the International Cemetery. It dates back to 1853.

It all started when Commodore Matthew C. Perry, USN, sailed from the U.S. on his history-making expedition to open the doors to Japan to western civilization and trade. His thoughts turned to the necessity of adequate bases for use by his squadron while negotiating with Japan and other Far Eastern countries. Bases were also needed by American merchantmen, as well as naval vessels, for coaling, provisioning, and as a haven of refuge against storms and piracy.

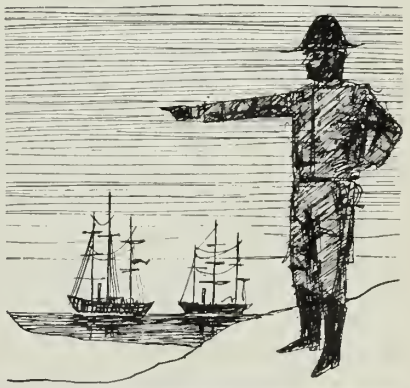
Commodore Perry addressed the Secretary of the Navy suggesting Napha (Naha) harbor in the "Lou Chew" islands as the ideal location for such a base. This suggestion received the blessing of President Fillmore and on 26 May 1853, in his flagship U.S. Steam Frigate *Mississippi*, Commodore Perry dropped anchor in Naha harbor.

When he completed his mission to Japan, the Commodore returned to his base at Okinawa and negotiated a treaty with the Regents at Shuri Castle. Among Perry's demands incorporated into the treaty was that a suitable burial place be provided for American dead. The place was located at Tumai (Tomari) Port, overlooking Naha harbor, and little more than a mile from the present Naval Air Facility at Naha.

The cemetery's incomplete muster list contains the names of John Williams, USS *Mississippi*, 24 Jul 1853 (Stone erected by his topmates as a fitting tribute of respect to his memory); Hugh Ellis, 1853, USS *Mississippi*; Jessie L. Carter, 1854; John Barnes, 1853; Eli Crosby, 1854; John Miller, 1854; and William Board, 1854. Four tombs of the same type, presumed to be Navy, have marker plates missing.

Through the turbulence of 100 years—countless typhoons and war, ending in the great battle of Okinawa in WW II—this same stilled and silent crew of Navymen remained undisturbed.

—LTJG R. K. Gremp, USNR.



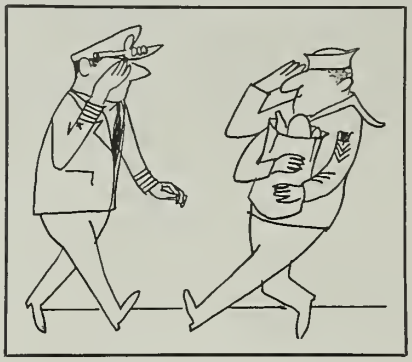
Report on the Annuity Plan for Families of Retired Navymen

COLD FACTS make a man stop and think—and here's something to think about: After a Navyman retires, if he should die before his wife or children, they will NOT receive six months' death gratuity and they will NOT continue to receive his retired pay. In other words, unless he takes steps now to protect them after his death, they may be in trouble, financially.

One way to help ease this problem is by taking advantage of the Uniformed Services Contingency Option Act (Public Law 239 83rd Congress).

Under this option plan you draw a little less retired pay during your lifetime, but your surviving dependents continue to receive a monthly check after your death. Depending upon the options you select, you can assure your wife a percentage of your retired pay for the remainder of her life or until she remarries, or a steady income for your children until they become 18, or marry.

The annuity plan, brought into effect in 1953, is non-profit, and in the average case the total amount collected by you and your survivors will be greater than the amount you



alone would have received if you had not elected to participate. Yet, the total cost to the government, worked on an "actuarial basis," is approximately the same.

Here's how the plan works. You will automatically be forwarded a copy of NavPers Form 591 some time after you have completed 17 years' service for pay purposes. On this form you may apply for the annuity, stating the options you desire; or, if you prefer, you may state that you do not wish to participate in the plan. In either case, you will then be told what to do to implement your choice.

If you do want the annuity, you must execute the required options before you complete 18 years' service or you will be ineligible. Even though you have no dependents at that time, executing the option will do you no harm and would insure your dependents' being protected if you acquire one or more while still on active duty. Deductions are not made until you actually retire, *and if you have not acquired dependents by that time, no deductions will be made from your retired pay.* If, on the other hand, you do not take one of the options, even though you do acquire dependents, you will be ineligible to participate in the program. The plan also contains provisions for modifying or revoking your option while you are still on active duty.

The plan allows you to select one or a combination of four basic options and to designate whether your dependents will receive one-eighth, one-fourth or one-half of your reduced retired pay. Here are the basic options:

1. *Annuity for your widow*—payable to, or on behalf of, the widow, until her death or remarriage.

2. *Annuity for a child or children*—payable to, or on behalf of, surviving child or children, so long as there is at least one surviving child unmarried and under 18 years of age. Where there is a child unmarried and over 18 years who is incapable of self-support because of mental or physical defects, the annuity would end upon marriage of such a child, or upon his death or recovery.

3. *Annuity for both*—payable to, or in behalf of, your wife and children. Ends upon death or remarriage of your wife, or if later, when your children become married or become 18 years old. If there is a mentally defective or physically incapacitated child unmarried and over 18, the annuity would terminate upon his marriage, recovery or death.

4. *Option to cover the situation in which your beneficiary dies before you do*—this may include the terms of either Options 1, 2, or 3 (or the combination of Option 1 and 2) with the added provision that no further reduction will be made in your pay should your beneficiary (or beneficiaries) precede you in death.

Some Pointers to Remember about the Retirement Annuity

Here are some points to remember about the election of options under the Uniformed Services Contingency Option Act. By electing to participate, you in no way affect your active duty pay and you are not required to pay or contribute any money.

The election simply constitutes an agreement whereby, when you retire, you agree to accept a reduced amount of retirement pay in order to guarantee your dependents an income after your death.

Under the option plan, if you do not elect to participate before you have completed 18 years' service for pay purposes, it is lost to you. *But, on the other hand, if you do elect to participate and later, while still on active duty, change your mind, you can drop out.*

A serviceman retiring because of *physical disability* before completing 18 years' service for pay purposes must submit an election no later than the date he selects the method for computation of retired pay.

A man without dependents may also elect to participate in the option plan. If he does elect to participate and later acquires dependents while still on active duty, they are covered. If they are acquired *after* retirement, however, they would not be eligible and the retired man would receive his full retirement pay. On the other hand, if the man without dependents turns "thumbs down" on the option plan and later acquires dependents after he has completed 18 years' service for pay purposes but is still on active duty, he is not eligible to participate.

It is important to you and your dependents to think twice before turning down the contingency option plan.

Another choice is also provided. You may elect any combination of the options providing benefits to your widow only, and one providing benefits to your children only, if the total amount of the benefits doesn't exceed one-half of your own reduced retired pay.

Here are two examples of how the option plan can work. Suppose that a 48-year-old commander has over 26 years' service for pay purposes and his wife is 43 years old. He has no disability and his youngest child is 10 years old. His gross retainer pay is $503.75 a month. He selects Option 3 and 4, and wants his wife to get one-half of his reduced retainer pay. Reduction of the commander's regular retainer pay would be $61.05, which guarantees his wife or surviving child $221.35 a month in case of the commander's death. With this added protection for his family, the commander would still receive $442.70 a month retainer pay.

The same thing is available to the retiring enlisted man. Let's take a non-disabled CPO for example. With over 22 years' service for pay purposes, this chief is 40 years old and his wife is 37. They have an eight-year-old child. He selects Options 3 and 4, with one-half of his reduced retainer going to the eligible survivor. His retainer pay is reduced by $16.38—this still leaves him $176.12 a month—and it guarantees the eligible survivor $88.06 a month.

Since the life expectancy of a disabled man is usually less, he must contribute more per month to guarantee his survivors the above amounts.

Here is how the option plan affects Navymen in different categories:

- Regular and Reserve personnel on active duty must submit an election before 18 years' service for pay purposes has been completed.
- Reservists, active or inactive, who have not finished 18 years' service for pay purposes are under the same provisions as the Regular Navyman in the same circumstances.

There are only two administrative exceptions to the 18-year service rule:

1. The man who retires as the result of a physical disability before completing 18 years' service must submit an election before the date he selects the method for computation of retired pay.

2. The man whose eligibility for making an election expires while he is missing or missing-in-action, has six months after his return to the jurisdiction of his service to decide what to do.

More detailed information can be found in BuPers Inst. 1750.1B.

Commands Now Distribute Navy Training Manuals

It should now be easier for enlisted men in certain ratings to obtain Navy Training Course books. Under a new system being tried, Navy text books for six ratings are being distributed directly to commands by the Chief of Naval Personnel.

Text books normally go from the printer to stocking supply points and are then requisitioned by commands as needed. Under the new scheme, the Bureau of Naval Personnel will send commands new and revised books according to allowance and on-board strength. Commands will only requisition extra copies as needed.

An advantage of the new plan is that the Correspondence Course Center will no longer have to furnish text books to enrollees taking any of the six courses when they are locally administered.

Courses being distributed under the trial system are: *Machinist's Mate 3* (NavPers 10522); *I.C. Electrician I and C* (NavPers 10557); *Quartermaster 3 and 2,* (NavPers 10149-B); *Lithographer I and C* (NavPers 10454); *Photographer's Mate 3* (NavPers 10373); and *Ship Fitter P 3 and 2* (NavPers 10592-B).

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as a index of current Alnavs and NavActs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, NavActs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; Bupers Instructions and Notices apply to all ships and stations.

Alnavs

(Covers two-month period)

No. 15—Advised that the act, providing for the free importation into the United States of personal and household goods under orders, has been extended until 1 Jul 1960.

No. 16—Announced the convening of line and staff selection boards to recommend officers in the grade of captain on active duty (except TARs) for promotion to the grade of rear admiral.

No. 17—Announced approval by the Secretary of the Navy of the report of the selection board which recommended USN warrant officers and chief warrant officers for promotion to grades W-4 and W-3.

No. 18—Requested prompt submission of annual ammunition report.

No. 19—Announced the convening of a selection board to recommend line officers on active duty (except TARs) for temporary promotion to the grade of captain.

No. 20—Advised that Public Law 85-472 made it possible to continue operations within authorized allotments for essential operating expenses.

No. 21—Urged extreme care while driving autos during summer holidays.

No. 22—Quoted letter from Secretary of Navy to president of line selection board on factors for consideration in promotion of captains to temporary rank of rear admiral.

No. 23—Directed that there be no official information or photographs released by Navy or Marine Corps personnel which relate to or reveal changes in state of readiness, alerts,

or prospective movements of any unit or personnel unless specifically authorized.

No. 24—Announced approval by the President of the report of a selection board which recommended line officers for temporary promotion to the grade of rear admiral.

No. 25—Extended congratulations to the naval establishment for the recent prompt and efficient deployment of forces.

No. 26—Announced approval by the President of the report of a selection board that recommended officers for temporary promotion to the grade of major general in the Regular Marine Corps.

Instructions

No. 1050.7 — Discusses specific guidelines which outline the circumstances under which emergency leave may be granted.

Amphib and Air Training For NROTC Midshipmen

More than 1400 juniors from 52 colleges and universities throughout the country took part in the 1958 amphibious and aviation training sessions for NROTC midshipmen at Little Creek, Va., and Corpus Christi, Tex.

During the summer, the midshipmen were divided into two regiments of more than 700 men each. On 9 July the first Regiment reported to the Naval Air Station at Corpus Christi for aviation indoctrination and the second reported to the Naval Amphibious Base, Little Creek, for its session with the amphibs.

At the end of July, after both groups had completed the first phase of their training, they changed places, via airlift, "to see how the other half lives."

Phase two ended late last month.

While all this was going on, other NROTC midshipmen got their 1958 training at sea on cruises with the Seventh Fleet in the Far East; in USS *Ranger* (CVA 61) on an around-the-Horn trip from Norfolk, Va., to Alameda, Calif.; with the Second Fleet in North European waters; with a HUK Group in the Atlantic and with the Pacific Fleet in the eastern and mid-Pacific.

ANSWERS TO QUIZ AWEIGH

This may sound fishy, but . . . . . .

1. (c) Ribbon or oarfish.

2. (a) Only 650 pounds—the big one got away.

3. (b) Barracuda. (Okay, let's start hearing your rebuttals on this one. We're not all in agreement either.)

4. (b) Codfish.

5. (c) Squid.

6. (c) *Triton*.

This month's quiz is on page 47.

No. 1120.12F—Outlines eligibility requirements and processing procedures whereby certain USN and USNR officers may be considered for appointment as permanently commissioned officers in the Regular Navy (Augmentation) program.

No. 1210.4B—Revises the billet and officer designator code system.

No. 1300.15B — Prescribes the length of overseas service for personnel permanently located ashore outside the United States.

No. 1306.21D — Refines and simplifies the Shorvey procedures, which report enlisted personnel completing prescribed periods of shore duty.

No. 1336.2C—Sets forth the procedure by which enlisted personnel may request enrollment in the U. S. Naval School of Music and describes the courses available.

No. 1430.11—Describes eligibility requirements for advancement to pay grades E-8 and E-9, and gives information concerning examinations, study materials and numbers to be advanced in fiscal year 1959.

No. 1500.25E—Announces dates for classes at training activities under the management of the Chief of Naval Personnel and certain schools of other services.

No. 1520.68—Makes information available concerning the assignment of officers to nuclear-powered surface ships.

No. 1910.16 (Sup. 1)—Authorizes two months' early separation of enlisted personnel serving on active duty during period 1 Aug 1958 through 31 Dec 1958.

No. 1630.2—Incorporates into the directives system the joint regulations concerning off-post military police activities.

No. 1755.13—Discusses the availability of certain types of scholarships for children of naval personnel.

No. 7312.5—Discusses procedures for the classification of costs of permanent change of station movements of naval personnel.

Notices

No. 1520 (30 May)—Described the eligibility requirements and procedures for officers to follow if they wish to request postgraduate work in fiscal year 1960.

No. 1910 (9 June)—Announced Secretary of Defense policy that entries regarding reason and authority not to be shown on Honorable Discharge Certificate.

No. 1430 (10 June)—Announced cancellation of the advancement in rating examinations for pay grades previously held in May and November.

No. 1750 (10 June)—Authorized Change No. 2 to BuPers Inst. 1750.-1B, which reflects changes made necessary by the enactment of the new military pay legislation.

No. 1510 (11 June)—Announced the selection of enlisted personnel for the Navy Enlisted Advanced School Program and the Navy Enlisted Scientific Education Program.

No. 5101 (11 June)—Described the methods used in New London, Conn., area in reducing off-duty motor vehicle accidents.

No. 1430 (12 June)—Discussed advancements resulting from the February 1958 service-wide examinations, and the opportunities for advancement which it is estimated will result from the August examinations.

No. 1130 (19 June)—Brought up to date the list of open rates in which Naval Reserve personnel on active duty may enlist in the U. S. Navy.

No. 1616 (26 June)—Provided information regarding the reported performance factors for the August 1957 service-wide examination and modified instructions concerning disposition of worksheet.

No. 1552 (7 July)—Informed all ships and stations of changes of procedure in the distribution of certain Navy Training Courses.

No. 1220 (11 July)—Supplemented instructions in the *BuPers Manual* for the administration of the Navy Enlisted Classification Coding system.

No. 1120 (14 July)—Announced Change No. 1 to BuPers Inst. 1120.-29, which is concerned with Officer Candidate School programs.

Standard Set of Tug Boat Signals Authorized by Navy After Testing in the Fleet

Sooner or later there comes a time when it is necessary for a skipper to use the services of one or more tugs in handling his ship without the help of a local pilot. Because of this, more than one good man has awakened in a cold sweat after dreaming of being jammed into a pier while he signals for full speed astern. He need sweat no more.

A standard set of hand and whistle signals has been devised for use in directing tugs within the U.S. Navy. This ruling has been promulgated in OpNav Inst. 3171.1.

In the past, there was no standard set of signals used to direct tug movements. They varied with the locality and the port. This fact indicated a need for a standard set of tug boat signals that would be simple, would not be subject to misinterpretation, and would conform in general with signals now used by pilots.

To do this, the Chief of Naval Operations circulated a proposed set of signals for comment. These went to commands who operate tugs and to operational commanders of naval ships who would use the services of tugs without the assistance of local pilots. Their concurrence was almost unanimous as to both the need of a standard set of signals and the signals proposed.

The instruction says that these signals shall be used throughout the naval service when hand or whistle signals are used to direct the movement of tugs. It further states that naval pilots, both service and civilian, shall use them as a basis for their hand and whistle signals to tugs.

There is a proviso that goes with this, however. Pilots are authorized to modify the signals as necessary to meet conditions peculiar to a particular port or condition.

While the signals are primarily for use within the U.S. Navy, it is hoped that civilian tug and pilot associations will eventually use them. (CNO has authorized the reprinting of these signals.)

If a commanding officer wants to use these signals with other than naval tugs, he should first determine that the tug master not only understands them but will respond to them.

TUG BOAT SIGNALS

HAND WHISTLE (Police Type)

FROM STOP TO HALF SPEED AHEAD	1 BLAST
FROM HALF SPEED AHEAD TO STOP	1 BLAST
FROM HALF SPEED AHEAD TO FULL SPEED AHEAD	4 SHORT BLASTS
FROM FULL SPEED AHEAD TO HALF SPEED AHEAD	1 BLAST
FROM STOP TO HALF SPEED ASTERN	2 BLASTS
FROM HALF SPEED ASTERN TO FULL SPEED ASTERN	4 SHORT BLASTS
FROM HALF OR FULL SPEED ASTERN TO STOP	1 BLAST
CAST OFF, STAND CLEAR	1 PROLONGED 2 SHORT

NOTES:

1. A blast is 2 to 3 seconds' duration.
   A prolonged blast is 4 to 5 seconds' duration.
   A short blast is about one second duration.
2. In using whistle signals to direct more than one tug, care must be exercised to ensure that the signal is directed to and received by the desired tug. Whistles of a different distinct tone have been used successfully to handle more than one tug.
3. These signals may be transmitted to the tug by flashing light. However, flashing light signals should be restricted to use only when hand whistle or hand signals cannot be used.
4. Normally these whistle signals will be augmented by the hand signals given below.

HAND SIGNALS

HALF SPEED AHEAD OR ASTERN—Arm pointed in direction desired

FULL SPEED (Either)—Fist describing arc (as in "bouncing" an engine telegraph)

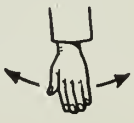
DEAD SLOW (Either)—Undulating movement of open hand (palm down)

STOP (Either)—Open palm held aloft facing tug

TUG TO USE RIGHT RUDDER—Hand describing circle as if turning wheel to right (clockwise) facing in the same direction as tug

TUG TO USE LEFT RUDDER—Hand describing circle as if turning wheel to left (counterclockwise) facing in same direction as tug

TUG TO RUDDER AMIDSHIP—Arm at side of body with hand extended, swung back and forth



CAST OFF, STAND CLEAR—Closed fist with thumb extended, swung up and down

NOTE: Tug shall acknowledge all of the above signals with one short toot (one second or less) from its whistle, with the exception of the backing signal which shall be acknowledged with two short toots and the cast-off signal which shall be acknowledged by one prolonged and two short toots.

Deadline for Applications to Postgrad School is 1 November

TO MEET CURRENT and future graduate training requirements, a large number of officers are needed in the Postgraduate Educational Program—particularly in the fields of new developments. The very nature of naval weapons systems requires that the major graduate training effort be in the combined fields of engineering and the physical sciences.

Policies have been changed to make the program more acceptable for officers who plan to request postgraduate work in Fiscal Year 1960:

- Line officers are no longer required to signify restricted line intent in order to undertake specialized technical postgraduate curricula, except for naval construction and engineering, and nuclear engineering (advanced).
- Officers are now eligible to commence certain postgraduate studies after three years of commissioned service instead of after their fifth year of service, as has been the policy in the past.

However, if you plan to submit an application, you'd better do it soon. *Applications for classes convening in Fiscal Year 1960 must be submitted by 1 Nov 1958.*

The program has a variety of curricula, many of which lead to a bachelor, master or doctorate degree. The Navy's prime graduate level educational facility is the U. S. Naval Postgraduate School, Monterey, Calif.

There are three component schools —the Engineering School, the Management School, and the General Line and Naval Science School.

- Engineering curricula are provided through the facilities of the Engineering School at Monterey and at civilian institutions known for their leadership in the fields involved.
- The Management School provides courses in the general field of management and is responsible for supervision of related curricula such as business administration and training conducted at selected civilian institutions.
- Detailed information on the General Line and Naval Science School can be found in BuPers Inst. 1520.43A of 7 Apr 1958.

Naval Intelligence School—A subcommand of the U. S. Naval Postgraduate School is the Naval Intelligence School in Washington, D. C., where the Naval Intelligence postgraduate curriculum is conducted. This school conducts training in all phases of intelligence, including strategic, operational and counter-intelligence, and conducts intensive instruction in foreign languages. The Postgraduate naval intelligence curriculum consists of instruction in the basic principles and techniques of intelligence operations, supplemented by lectures, seminars and the solution of practical intelligence problems.

Consistent with language training requirements, qualified officers will have the opportunity to continue foreign language and area study, extending their training to 14-24 months, dependent on the foreign language studied.

ELIGIBILITY REQUIREMENTS:

Specific eligibility requirements as to code designator, grade, operational experience and academic prerequisites for the various curricula are given in detail in BuPers Notice 1520 of 31 May 1958. The following stipulations apply to the grade requirements:

For curricula under the areas of Aeronautical, Civil (except Civil Engineering, Qualification), Naval (except Naval Construction and Engineering), and Ordnance Engineering, officers must have an original date of first commission effective on or before 30 Jun 1956. However, in some instances, LCDRs with date of rank of 1 Jan 1958 or later are eligible.

Obligated service requirements call for each applicant to agree not to request resignation or inactive duty during the curriculum. He must also agree to serve on active duty in the naval service after completion of his studies one year for each half year or fraction thereof of postgraduate instruction received. This period of obligated service is in addition to that incurred upon commissioning.

A single selection board will review all applications for postgraduate instruction and select all candidates.

The length of time the student spends in the program will depend on the curriculum undertaken. Some may be completed in as little as five months, while others may take as long as three years. All line officers selected and ordered to Monterey for technical engineering curricula (Aeronautical, Electronics, Mechanical and Ordnance), will be assigned to the corresponding two-year general curriculum. Later specialized assignments, within quota allocations, will be upon the recommendation of the Superintendent, Naval Postgraduate School, and approval of the Chief of Naval Personnel.

Postgraduate schooling is planned to fit into the duty rotation cycle of all officers as a normal tour of shore duty. Line officers are not made available for selection for postgraduate education if assignment ashore at the time of request would be counter to the best career interests of the individual. Unrestricted line officers completing two- or three-year curricula normally will be assigned to sea duty upon graduation, unless they have already been selected for

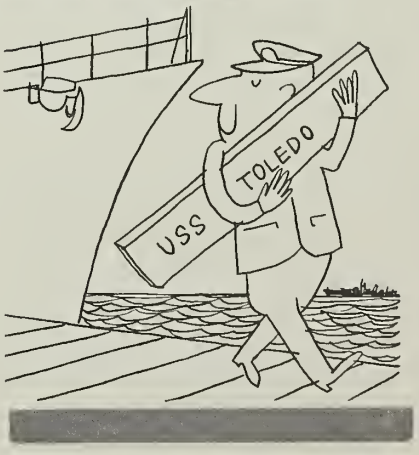
NOW HERE'S THIS

Must Like Ohio

When it comes to plank-owning there aren't many Navymen around who could top Charles W. Fountain, RDC, USN, of USS *Toledo* (CA 133).

Enlisting in the Navy on 26 Jun 1946, Chief Fountain was fresh out of boot camp when he joined *Toledo*'s crew in time for her commissioning in October of that year. Since then, he's risen from boot to chief, participated in the Korean conflict, made an around-the-world cruise and put in many cruises to the Far East—all, of course, in *Toledo*.

Next month he'll be celebrating the 12th anniversary of the date he reported on board the Pacific Fleet heavy cruiser.



transfer to a restricted line category.

After their postgraduate training, staff corps and restricted line officers will be assigned to billets which will provide a balanced program between specialization and broadening experience in their career fields.

All officers may expect a minimum of two tours of duty, afloat or ashore, associated with their field of study after completion of a postgraduate course of instruction.

Remember, the dealine for submission of applications is 1 Nov 1958. If you desire postgraduate education and meet the requirements laid down in BuPers Notice 1520 of 31 May 1958, you should submit your application via official channels to the Chief of Naval Personnel (Pers-B1136). An original and two copies of the application are required.

Latest List of Motion Pictures Scheduled for Distribution To Ships and Overseas Bases

The latest list of 16-mm. feature movies available from the Navy Motion Picture Service, Bldg. 311, Naval Base, Brooklyn, N. Y., is published here for the convenience of ships and overseas bases. The title of each picture is followed by the program number.

Those in color are designated by (C) and those in wide-screen processes by (WS). Distribution began in June.

Sayonara (1089) (C) (WS): Drama; Marlon Brando, Patricia Owens.

Bonjour Tristesse (1090) (C) (WS): Drama; Deborah Kerr, David Niven.

Crash Landing (1091): Drama; Gary Merrill, Nancy Davis.

Damn Citizen (1092): Drama; Keith Andes, Maggie Hayes.

Old Yeller (1093) (C): Melodrama; Dorothy McGuire, Fess Parker.

Legend of the Lost (1094) (C) (WS): Adventure Drama; John Wayne, Sophia Loren.

Merry Andrew (1095) (C) (WS): Comedy; Danny Kaye, Pier Angeli.

The Safecracker (1096): Melodrama; Ray Milland, Barry Jones.

Satchmo, The Great (1097): Documentary; Louis Armstrong, Leonard Bernstein.

Chase a Crooked Shadow (1098): Melodrama; Richard Todd.

Count 5 and Die (1099) (WS): Melodrama; Jeffrey Hunter, Nigel Patrick.

"You'd look good with a beard, Craxton."

Saddle the Wind (1100) (C) (WS): Western; Robert Taylor, Julie London.

Cross Up (1101): Melodrama; Larry Parks, Constance Smith.

The Lost Lagoon (1102): Drama; Jeffrey Lynn, Lelia Barry.

Run Silent, Run Deep (1103): Drama; Clark Gable, Burt Lancaster.

Cattle Empire (1104) (WS): Western; Joel McCrea, Gloria Talbot.

Day of the Badman (1105) (WS): Western; Fred MacMurray, Joan Weldon.

Showdown at Boot Hill (1106) (WS): Western; Charles Bronson, Robert Hutton.

Teachers Pet (1107): Romantic Comedy; Clark Gable, Doris Day.

All Mine to Give (1108) (C): Drama; Glynis Johns, Cameron Mitchell.

Touch of Evil (1109): Drama; Charleton Heston, Janet Leigh.

The True Story of Lynn Stuart (1110): Drama; Betsy Palmer, Jack Ford.

Toughest Gun in Tombstone (1111): Western; George Montgomery, Jim Davis.

Return to Warbow (1112) (C): Western; Phil Carey, William Leslie.

No Time for Sergeants (1113): Comedy; Andy Griffith, Myron McCormick.

Sing Boy Sing (1114) (WS): Musical; Tommy Sands, Lili Gentle.

Underwater Warrior (1115) (WS): Drama; Dan Dailey, James Gregory.

Handle With Care (1116): Drama: Dean Jones, Joan O'Brien.

Curse of the Demon (1117): Science Fiction; Dana Andrews, Peggy Cummings.

Marjorie Morningstar (1118) (C): Drama; Gene Kelly, Natalie Wood.

The Young Lions (1119) (WS): Drama; Marlon Brando, Montgomery Clift.

Gang War (1120) (C): Melodrama; Charles Bronson, Kent Taylor.

Screaming Mimi (1121): Melodrama; Anita Ekberg, Phil Carey.

The Muggers (1122): Melodrama; Kent Smith, Nan Martin.

I Married a Woman (1123): Comedy; George Gobel, Diana Dors.

Oregon Passage (1124) (C) (WS): Western; John Ericson, Lola Albright.

The Brothers Karamazov (1125) (C): Drama; Yul Brynner, Maria Schell.

High Hell (1126): Melodrama; John Derek, Elaine Stewart.

Seven Guns to Mesa (1127); Western; Lola Albright, Charles Quinliven.

Cry Terror (1128); Melodrama; James Mason, Rod Steiger.

Peyton Place (1129) (C) (WS): Drama; Lana Turner, Lloyd Nolan.

The Gift of Love (1130) (C) (WS): Drama; Robert Stack, Lauren Bacall.

Violent Road (1131): Drama; Brian Keith, Dick Foran.

Country Music Holiday (1132): Musical; Zsa Zsa Gabor, Rocky Graziano.

St. Louis Blues (1133): Musical; Nat "King" Cole, Eartha Kitt.

Bullwhip (1134) (C) (WS): Western; Guy Madison, Rhonda Fleming.

Fort Massacre (1135) (C) (WS): Western; Joel McCrea, Forrest Tucker.

Hong Kong Affair (1136): Melodrama; Jack Kelly, May Wynn.

Cop Hater (1137:) Drama; Robert Loggia, Gerald O'Loughlin.

Left-Handed Gun (1138): Western; Paul Newman, Lita Milan.

More Warrant Officers Head Up the Ladder

The names of 350 USN warrant officers who were selected for promotion by the Navy selection board have been announced.

These selections included 322 temporary promotions and 28 permanent. Recommendations for temporary promotion included 213 to W-2, 77 to W-3 and 32 to W-4. In its permanent selections, the board named 7 for promotion to W-2, 1 to W-3 and 20 to W-4.

Uniform Tours of Overseas Shore Duty Set for Armed Forces

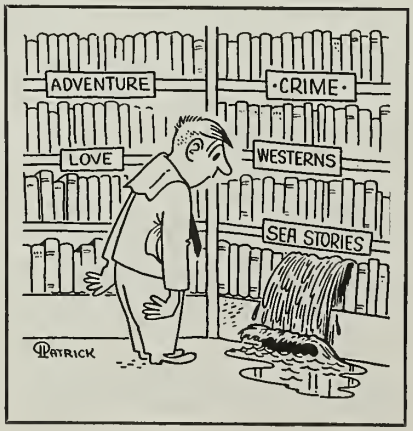
UNIFORM TOURS of overseas shore duty—ranging from 12 to 36 months—are now in effect for members of the armed forces serving in more than one hundred overseas areas.

In favorable areas the standard pattern generally calls for 36-month tours for personnel accompanied by their dependents and 24-month hitches for those without their families. In locations where living conditions are less favorable, owing to climate, isolation or other factors, shorter tours varying with local conditions have been established.

The military services reached agreement on desirable tour lengths in conferences held during the past year. However, a Marine Corps request for an exception for Fleet Marines serving in the Far East is under study, with the final decision still pending.

For the other armed forces, including the Navy, here's what the standard tours will be:

Country or Area	Tour With Dependents (In months)	Tour Without Dependents (In months)
AFRICA AND MIDDLE EAST AREA		
Egypt	36	24
Ethiopia (except Eritrea)	24	18
Eritrea (Asmara)	30	18
Iran (except Teheran)	24	12
Teheran	24	18
Iraq	24	18
Liberia	36	24
Lybia (except Tripoli)	30	18
Tripoli	36	24
Morocco:		
Ben Guerrie area	24	12
Casablanca area including Nouasseur	36	24
Marrakech area	30	18
Port Lyautey area including Boul Haut, Rabat and Rabat Sale	30	18
Sidi Slimane area	24	12
Pakistan	24	18
Saudi Arabia (except Dhahran)	18	12
Dhahran	24	18
Turkey:		
Ankara, Istanbul and Izmir	30	18
Adana, Sile, Golcuk and Karamousal	24	18
UN Truce Supervisory Organization, Palestine	24	18
EUROPE		
Austria	36	24
Belgium	36	24
Crete	24	18
Denmark	36	24
France	36	24
Germany	36	24
Greece	30	18
Italy	36	24
Malta	24	12
Netherlands	36	24
Norway	36	24
Portugal	36	24
Spain	36	24
United Kingdom	36	24
Yugoslavia	24	18
FAR EAST AND PACIFIC AREA		
Australia	36	24
Cambodia	24	12
Eniwetok	*	12
Guam	24	18
Hawaiian Islands	36	24
Iwo Jima	*	12
Johnston Island	*	12
Japan	36	24
Korea	24	13
Kwajalein	18	12
Midway Islands	18	12
Philippine Islands	24	18
Ryukyu Islands	30	18
Saipan	24	18
Taiwan	24	15
Thailand (excluding Bangkok)	*	12
Bangkok	24	18
Viet-Nam (excluding Saigon)	24	12
Saigon	24	14
NORTH AMERICA AND NORTH ATLANTIC AREA		
Alaska:		
Aleutian Peninsula and islands west of 162nd Meridian, including Adak, Attu and Dutch Harbor	18	12
Anchorage area including Elmendorf AFB and Fort Richardson	36	24
Big Delta area including Fort Greely	24	18
Fairbanks area including Eielson and Ladd AFBs	30	18
Juneau area	24	18
Kenai-Whittier area including Wildwood Station	24	18
Nome	24	12
Fire Island	*	18
Kodiak Island	24	12
Point Barrow area	18	12
Azores	24	18
Canada:		
Labrador (excluding Goose Bay)	24	12
Goose Bay	24	18
Metropolitan areas	36	24
Newfoundland:		
Argentia	24	18
St. Johns and Stephensville	36	24
Other areas	24	12
Greenland	24	12
Iceland	24	12
Mexico	36	24
SOUTH AMERICAN AND CARIBBEAN AREA		
Antigua	24	18
Anguilla	24	18
Argentina	36	24
Aruba	24	18
Bermuda	36	24
Bolivia	24	18
Brazil	36	24
Chile	36	24
Colombia	36	24
Cuba:		
Guantanamo Bay	24	18
Havana	36	24
Dominican Republic	36	24
Ecuador	24	18
Eleuthera	24	18
El Salvador	36	24
Guatemala	36	24
Haiti	24	18
Honduras	24	18
Nicaragua	24	18
Panama including Canal Zone	36	24
Paraguay	24	18
Peru	36	24
Puerto Rico	36	24
St. Lucia	*	12
Trinidad	24	18
Uruguay	36	24
Venezuela	36	24



Pamphlets on Living Conditions at some of these locations are available. They may be obtained by writing to the Chief of Naval Personnel (Pers G221) Navy Department, Washington 25, D. C. The latest on Shorvey-Seavey rotation is published in BuPers instructions and reported in ALL HANDS. Check with your personnel office.

* Locations indicated by asterisks are areas where dependents are not permitted.

Get Those Applications In Now for NESEP and NEASP

If you are planning to apply for the Navy Enlisted Advanced School Program (NEASP) or the Navy Enlisted Scientific Education Program (NESEP), you should submit your application immediately as it must be received by the Chief of Naval Personnel before 15 Oct 1958.

In submitting your application, be sure that you comply with *all* the provisions of BuPers Inst. 1510.69C.

To date, more than 50 per cent of the applications received by the Chief of Naval Personnel have been incomplete.

Applications must be submitted on the Enlisted Evaluation Report, NavPers 1339, (Rev 3-56). Be sure to complete all information requested on both the front and back of the form and submit transcripts concerning your educational background. High school transcripts are required for consideration before the selection board.

Accompanying each application must be completed BuMed Standard Forms 88 and 89.

A single application requesting consideration for both programs may be submitted if you desire dual consideration.

Detailed information on the NEASP and NESEP can be found in the August 1958 ALL HANDS.

Awards Go to Navy Activities For 'Safety Achievement'

"Superior quality of leadership" has earned glowing letters of commendation for the commanding officers of 13 activities who earned the "Secretary of the Navy Award for Achievement in Safety" for 1957.

Vice Admiral H. P. Smith, USN, in commendation letters to the Bureau of Naval Personnel activities, said, "Safety Awards such as this may only be earned when a superior quality of leadership is demonstrated by the commanding officer, his officers and all other personnel within the command. It indicates an acceptance of moral responsibility on the part of all who have contributed directly to the safety program." Activities commended are:

- U.S. Naval Amphibious Base, Coronado, San Diego, Calif.
- U.S. Naval Academy, Annapolis.
- U.S. Naval Retraining Command, Naval Base, Portsmouth, N.H.
- U.S. Fleet Air Defense Training Center, Dam Neck, Virginia Beach, Va.
- U.S. Naval Postgraduate School, Monterey, Calif.
- U.S. Naval Amphibious Base, Little Creek, Norfolk, Va.
- U.S. Naval Training Center, Bainbridge, Md.
- U.S. Naval Training Center, San Diego, Calif.
- U.S. Naval Base—U.S. Fleet Training Center, Newport, R.I.
- U.S. Naval Schools, Construction—U.S. Naval Construction Battalion Center—U.S. Naval Advanced Base Depot, Port Hueneme, Calif.
- Armed Forces Staff College, Norfolk, Va.
- Navy Recruiting Station and Office of Naval Officer Procurement, Minneapolis, Minn.
- Navy Recruiting Station and Office of Naval Officer Procurement, Chicago, Ill.

Nearly 5000 Navymen Will Advance to Grade E-4 or Earn Striker Designations

As a result of the May 1958 service-wide examinations, almost 5000 Navymen will be either advanced to pay grade E-4 or designated as strikers on 16 Sep 1958. Here is a breakdown of the numbers by rate:

RATE	E-4	STRIKERS
AEI3	90	17
AEM3	231	93
AG3	63	20
AQB3	26	12
AQF3	70	14
ATN3	222	66
ATR3	159	52
ATS3	5	1
CT3	279	96
EM3	505	99
ETN3	141	31
ETR3	180	44
ETS3	44	11
GF3	27	11
GS3	19	3
OM3	2	1
IC3	199	69
QM3	170	32
UT3	25	11
RD3	355	101
RM3	565	175
SM3	169	48
SO3	146	54
TM3	96	38
Total	3788	1099

USN Appointments Made for Reserves, Temporary Officers

The names of 307 Naval Reserve and temporary officers recommended for permanent appointment in the Regular Navy have been announced by the Augmentation Continuing Selection Board.

Those to receive appointments, provided they meet all administrative requirements are: Line, 68; Line Women, 24; Aviation Line, 135; Special Duty (Law), one; Limited Duty Officer-Aviation Electronics, one; Medical Service Corps, five; Nurse Corps, 28; Supply Corps, 25; Chaplain Corps, seven; Civil Engineer Corps, 13.

Feel Crowded? Want to Change to a Critical Rating?

If you are in one of the "over requirement ratings" with slow promotion opportunities, it may be to your advantage to check into the Navy's rating conversion program.

This program enables eligible personnel of the crowded ratings to convert to one of the more "critical" ratings through formal school or in service training.

Eligible for this program are a limited number of personnel in each of the following ratings: BM2, BM1, GM3, GM2, GM1, MN1, CS2, CS1, AD1, ADC, AO1, AOC, SD3, SD2, SD1, and SDC.

The open ratings which personnel of the above listed rates may convert to include:

- all pay grades (E-4 through E-7) of SM, RD, SO, RM and IC:
- pay grades E-4, E-5 and E-6 in CTR and AT
- pay grades E-5 and E-6 in the CTM rating
- pay grades E-4 and E-5 in the QM, ET, NW and UT ratings
- pay grade E-5 only in the AQ rating
- pay grade E-4 only in the TM, OM and TD ratings

These are the current "over" and "under" ratings. BuPers Inst. 1440.18A, which originally announced this conversion program, is in the process of being revised to include the above listed ratings.

DECORATIONS & CITATIONS

"For exceptionally meritorious conduct in the performance of outstanding service to the Government of the United States . . ."

★ BOWERS, Richard A., LTJG, CEC, USN, as construction officer for the United States Naval Air Facility, McMurdo Sound, from December 1955 to October 1956, and as officer-in-charge of the United States South Pole Station from 20 Nov 1956 to 4 Jan 1957. In these capacities while serving with Deep Freeze I in the Antarctic, LTJG Bowers consistently carried out his responsibilities with professional skill and efficiency.

★ CANHAM, David W., Jr., LCDR, USNR, as officer-in-charge of the U.S. Naval Air Facility, McMurdo Sound, Antarctica and as Executive Officer, United States Naval Mobile Construction Battalion (Special) during Operation Deep Freeze I and II from 20 Dec 1955 to 22 Jan 1957. During a period of total darkness, Lieutenant Commander Canham was in charge of the successful construction of a sea-ice runway and associated facilities which were necessary for the establishment of the United States Scientific Station at the geographic South Pole in connection with the International Geophysical Year.

★ KENT, Donald F., CDR, USN, as Assistant Chief of Staff for Logistics, United States Naval Support Force, Antarctica, during Operation Deep Freeze I and II from 7 Feb 1955 to 22 Mar 1957. During this period, Commander Kent was responsible for the planning and implementation of all phases of the logistics program, the unloading of all supplies and equipment, and the establishment of supply depots to support the construction needed in the operation of seven Antarctic bases.

★ KETCHUM, Gerald L., CAPT, USN, as Deputy Commander, United States Naval Support Force, Antarctica, during Operation Deep Freeze I and II from 1 Feb 1955 to 22 Mar 1957. "An extremely competent and resourceful leader," Captain Ketchum was responsible for and directly supervised the preparation and implementation of plans for two Antarctic expeditions which involved the design, establishment and operation of seven widely dispersed bases constructed to support the Antarctic program of the United States National Committee for the International Geophysical Year.

★ SHINN, Conrad S., LCDR, USN, as plane commander of the transport plane which successfully accomplished the first landing and take-off of an aircraft at the South Pole on 31 Oct 1956. Lieutenant Commander Shinn, who planned and executed this flight in a heavily loaded aircraft over extremely hazardous terrain, also succeeded in landing at the geographic South Pole on a dangerous snow surface approximately 10,000 feet above sea level where the air temperature was 58 degrees below zero.

★ WHITNEY, Herbert W., CDR, CEC, USNR, as Commanding Officer, Mobile Construction Battalion (Special) with the United States Naval Support Force, Antarctica, during Operation Deep Freeze I and II from 15 Feb 1955 to 25 Mar 1957. "Exercising a high degree of professional skill and resourcefulness," Commander Whitney was eminently successful in carrying out his responsibilities which included the development and implementation of all plans to place his battalion in operation as required to aid in executing two of the largest operations ever undertaken in the history of polar exploration.

★ YOUNG, Victor, CWO, CEC, USN, as Base Operations Officer at Little America Station during Operation Deep Freeze 1, Antarctica, from 10 Jan 1956 to 28 Feb 1957 during which time he conducted reconnaissance of the base site, laid out a safe route of access over the hazardous sea ice and crevasses of Ross Ice Shelf, and directly supervised construction of the base in adverse weather and under pressure of ship offloading.

"For heroic conduct not involving actual conflict with an enemy . . ."

★ HEISHMAN, Kenneth H., FN, USN, for heroic conduct while serving with Beach Jumper Unit TWO, U.S. Naval Amphibious Force, United States Atlantic Fleet, at Little Creek, Va., on 6 May 1957. When an explosion and fire occurred on board a 94-foot Beach Jumper craft moored at the pier, Heishman heard the screams of two shipmates trapped in the blazing galley, made his way to a hole torn in the deck above the compartment and aided in removing both of the trapped men to safety moments before the compartment became totally enveloped in flames.

★ JOHNSON, Willie E., SH3, USN, for heroism in rescuing a shipmate from drowning in San Diego Bay, Calif. during the hours of darkness on 2 Apr 1957. Observing two men fall overboard from a water taxi into the swift-running current, Johnson immediately jumped into the frigid waters from an adjacent vessel and, after an unsuccessful attempt to reach one of the drowning men, swam to the aid of the other.

★ SAYRS, Larry L., HM3, USN, for heroic conduct in rescuing a fellow serviceman from a crashed and burning helicopter in a mountain area approximately 15 miles west of Bridgeport, Calif., on 26 Oct 1957. When the helicopter in which he was riding crashed and burst into flames, Sayrs, along with the pilot, co-pilot and a crewman, quickly escaped from the wreckage and started to flee from the scene. After hearing cries for help coming from the burning aircraft, he immediately returned with the crewman, climbed into the flaming wreckage and rescued another passenger who was trapped in the cabin of the plane.

★ SCHNURR, Herman J., CDR, CHC, USN, for heroic conduct while serving at the U.S. Naval Station, Treasure Island, Calif., on 28 May 1957. When an armed crewman on board uss *Uvalde* (AKA 88) shot and killed an officer, seriously wounded another, and took refuge on the flying bridge of the ship, threatening with a loaded .45 caliber pistol all who approached him, Chaplain Schnurr, who was notified of the situation, unhesitatingly walked toward the deranged man and talked to him in a calm and persuasive manner. After four and one-half hours, the man relinquished his gun to the chaplain.

★ SMITH, Donald E., LTJG, USNR, for heroic conduct while serving on board uss *Franklin D. Roosevelt* (CVA 42) on 19 Jun 1957 when he assisted in the rescue of three boiler room crew members from the boiler room access trunk after an explosion in the number one pump room. LTJG Smith displayed outstanding courage in his descent through the steam to the three totally exhausted men whom he helped up the highly heated ladder to the second deck where repair parties removed them to a safe area.

GALLANT VETERAN

In years to come the rise and fall of the battleship—to be discussed in a future issue of ALL HANDS—will undoubtedly be the source of more sea stories and reminiscing among members of the "Old" Navy (as well as many of the "New") than any other subject. *USS Pennsylvania* (BB 38) will be among those prominently mentioned.

THE SECRETARY OF THE NAVY *takes pleasure in commending the United States Ship* Pennsylvania *for service as follows:*

"For outstanding heroism in action against enemy Japanese forces in the Pacific War Area from 4 May 1943, to 10 Feb 1945. Operating under ten separate commands, USS Pennsylvania *was the only battleship to take part in every combat amphibious operation during this period from Attu in the northern area to Lingayen in the Philippines. Imperiled by perpetual fog, she served as Flagship of the Task Force Commander during the Aleutians Campaign and navigated in poorly charted waters to deliver her accurate broadsides on predetermined but invisible targets; intensive fire from her batteries blazed the way for our assault waves in the Gilberts, the Marshalls and the Marianas, silencing the enemy's heavy guns, locating and neutralizing camouflaged emplacements and rendering sturdy support for our land forces.*

"A gallant and dependable veteran, Pennsylvania, *completed nearly thirty years of unfailing service by her deadly close-in bombardment and gunfire supporting the recapture of the Philippines, fulfilling her prolonged and vital mission without casualty to herself or her personnel by Japanese fire.*

"Handled superbly in the face of many obstacles throughout this period, Pennsylvania *achieved an illustrious combat record, reflecting the courage, skill and brilliant teamwork of the officers who plotted her course, the pilots who spotted her gunfire and the operational force which aided in maintaining her fighting efficiency.*

"All personnel attached to and serving on board USS Pennsylvania *during the above mentioned period are authorized to wear the Navy Unit Commendation Ribbon."*

IN THE FALL of 1917, when the Allied Naval Forces began to collect the forces that were to be known as the Allied-British Grand Fleet, USS *Pennsylvania* (BB 38), flagship of the U. S. Fleet, was told she could not operate with the forces seeking out the German Navy. She was "too modern." Only coal-burning battleships could be included in the Allied Force because no tankers were available.

She *was* modern. She had been commissioned only the year before and, at that time, was the largest and most efficient battleship built by the United States. *Pennsy* was authorized by Congress in August 1912; her keel was laid in October 1913; she was launched at Newport News in March 1915 and commissioned in June 1916. She was of 31,400 tons, had a trial speed of 21 knots, and carried 12 14-inch guns and 22 3-inch guns.

She was a ship to be reckoned with for the next 30 years. In the years between World War I and II she played an effective but quiet role, during an era in which the US emerged as the leading sea power of the world.

NEVERTHELESS, her fighting history really begins when she shoved off from Long Beach 23 Apr 1943. This is where our narrative picks her up, upon her arrival a week later at Cold Bay, Alaska. (*Pennsylvania* had been severely damaged during the raid on Pearl Harbor, had

USS PENNSYLVANIA (BB 38) was a big gun in Navy for over 30 years. Born in WW I, she lived through WW II.

been patched up and returned to the States for further repairs and alterations. Throughout the greater part of 1942 she had served with Task Force I, operating out of San Francisco.)

The battleship that arrived at Cold Bay was a vastly different creature from what she had been back in '16 when she was declared to be "too modern."

Now, the fight was against obsolescence. Her tripod mainmast was removed and replaced with a fire control tower and a pole mast. The conning tower was removed. The two cranes were removed, and two booms were added to take their place. The catapult on Turret 3 was removed. New radars were installed; two search and four fire control, bringing the total to six.

But the most extensive changes were made in the AA batteries. The 3-inch/51 broadside guns and the 5-inch/25 AA guns were replaced with eight 5-inch/38 dual-purpose twin mounts. The 1.1s were replaced with 10 40mm quads. Additional 20mm were installed. When *Pennsy* was ready for her Alaskan venture, she carried 12 14-inch/45s, 16 5-inch/38s, 40 40mms, 50 20mm, and eight .50 caliber guns. Her AA battery was regarded as being as formidable as any in the Fleet.

North Pacific Campaign

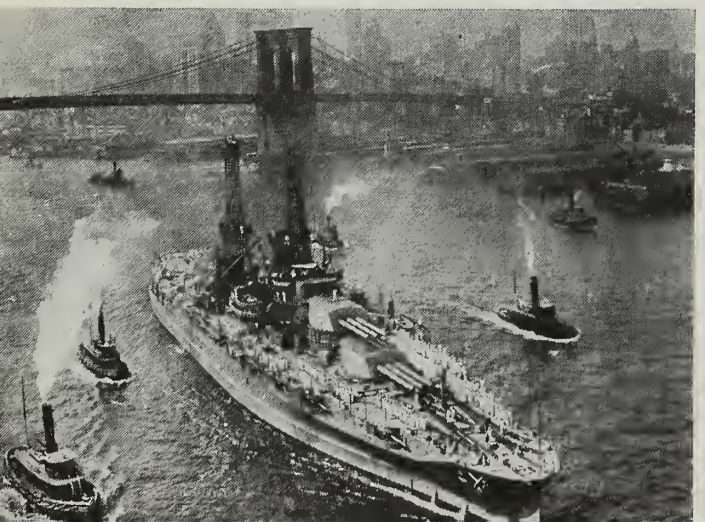
THE ALASKAN VENTURE was to be an amphibious operation. With *Pennsylvania* as flagship, USS *Idaho* (BB 42) and *Nevada* (BB 36), the escort carrier *Nassau* (CVHE 16) and numerous transports and destroyers were to attempt to oust Japanese forces which were known to have occupied two islands in the Aleutians—Attu and Kiska.

There is, it is said, only one kind of weather in the Aleutians—bad. It is cold, the fogs are thick and continuous, the seas are rough. It offers little encouragement for any type of military activity and less than none for amphibious operations.

Attu, the less strongly garrisoned of the two islands and the westernmost in the chain, was selected for the first attack. The first scheduled attack was cancelled because seas were too heavy to permit a landing.

Pennsylvania's first bombardment took place a couple of days later during a fog so heavy that land was never sighted. One important note: the entire mission was accomplished by radar at a range of some 9000 yards. This is what makes the action dramatic; the bare facts make the battle seem almost routine.

TOO MODERN—*USS Pennsylvania* (BB 38) was too modern to see much action in WW I because of lack of oilers.



KIN FOLK—Sailing ship *Pennsylvania* was receiving ship at Norfolk when yard was captured in Civil War.

THE BOMBARDMENT the following morning also took place in a dense fog, and the approach was made by radar. Both the main and the secondary batteries, were fired during part of the run. The fire was spotted by a shore fire control party and, after the fog had lifted, by surface spotters.

Pennsylvania bombarded a third time in support of the infantry attack on the west arm of Holtz Bay. This time there was sufficient visibility to make the approach and the first leg of the firing was run by visual bearings. Later, however, the fog set in; the visibility remained low for the remainder of the day.

The ship was maneuvered in a restricted area entirely by radar for more than two hours, during which the main and secondary batteries fired at targets without endangering our own infantry 500 yards to the right of the area and our scout troops 1500 yards beyond.

This bombardment materially weakened enemy resistance in the west arm of Holtz Bay. Our ground forces advanced into and occupied the area.

FROM 16-19 MAY *Pennsylvania* operated with *Nassau* in an area about 50 miles north and east of Attu, then headed for Adak. One afternoon, during an air alert, an explosion occurred in the gasoline stowage compartment.

There were no casualties, but there was some structural damage. *Pennsylvania* took time out for repairs, then returned to Adak in August where she was part of the Kiska Attack Force.

Again she was serving as flagship. She had not been assigned the duties of a fire support vessel in this operation since that would reduce the efficiency of the command ship, particularly by restricting her movement.

Pennsylvania's crew found the August weather in the Aleutians considerably milder than it had been in May, but it was still cold by ordinary standards and the area was, as always, covered by patches of dense fog.

On the morning of 15 August assault troops landed without opposition and pressed inland on the western beaches of Kiska. By the next evening it was evident that the island was completely uninhabited. The only living creatures found on the island were two ragged, lonely dogs. (As a memento of the operation, *Pennsylvania* ship fitters made and presented to the commanding admiral a miniature fire hydrant.)

The Gilberts and Marshalls

AFTER NUMEROUS PRACTICE SHOOTS, including a bombardment of Kahoolawe, and then rehearsal assault landings on Maui, *Pennsylvania* left Pearl Harbor

on 10 November for the Gilbert Islands Campaign, our first assault on Japanese positions in the Central Pacific.

She carried the 5th Amphibious Force Commander and was part of the Northern Attack Group whose objective was Makin Atoll. This atoll lies slightly north of the equator, but the route of the task force, in an attempt to confuse the enemy, led to the south of the equator, and then north-westward from the vicinity of the Phoenix Islands.

The task force, composed of four battleships, four cruisers, three escort carriers, transports and destroyers, approached Makin Atoll from the southeast on 20 November.

Here, *Pennsylvania* joined in the bombardment for about one and one-half hours, when it had to be broken off abruptly for an air strike. During this brief shoot the main battery expended 403 rounds of ammunition and the secondary battery 246 rounds.

This time, heat was the problem. Temperatures in the after magazines mounted to as high as 115 degrees. During the bombardment seven men in the magazines passed out from heat exhaustion. Several others were victims of the combined effect of the heat, exertion and the fumes from the powder bags.

Pennsylvania, as flagship of the 5th Amphibious Force, carried 24 radio transmitters and 41 receivers. The communications on "Dog Day," and thereafter until retirement from the area, required the manning of all this equipment plus about 25 remote operating positions. Item: at no time during the entire operation were communications disrupted.

Pennsylvania excelled in making the difficult and the hazardous look routine.

HER NEXT MAJOR operation was Kwajalein. The assault force was divided into two parts, one to strike at Roi and Namur islands at the northern end, and one at Kwajalein Island at the southern end. *Pennsylvania* was assigned to the southern group.

At 0618 on 31 January the main battery of *Pennsylvania* opened fire on Kwajalein Island.

It was still dark at the time. As the first salvo thundered out, a sailor standing topside yelled in the direction of the island,

"Reveille."

The secondary and 40mm batteries joined in and the bombardment continued throughout the day. Enemy guns, blockhouses, pillboxes and blockading sea walls were demolished. Ammunition dumps and fuel stowages were seen to blow up and burn.

The next day *Pennsylvania* carried out her scheduled bombardment before, during and after the landing on the island by Marine and Army troops. Although Kwajalein was heavily fortified, all troops made the landing unopposed.

On the evening of 3 February *Pennsylvania* entered the lagoon and anchored near Kwajalein Island. Heavy fighting was still in progress on the northern end of the island, where the Japanese were slowly being driven back.

TEN DAYS after the initial attack, *Pennsylvania* was able to push on to Majuro Atoll to replenish ammunition, her Kwajalein mission accomplished. At Majuro, after two small fires below deck and some 80 hours of almost continuous labor, she was ready for her next job.

Because of rapid victory at Kwajalein, the operations against Eniwetok Atoll, westernmost of the Marshalls, was undertaken earlier than originally planned. Nevertheless, on 17 February, *Pennsylvania* found herself steaming through Deep Entrance into Eniwetok Lagoon, blazing away at Engebi Island.

Pennsylvania and *Tennessee* (BB 43) were assigned the duty of protecting the reconnaissance boat teams, and when they made their approach to the landing beaches at 1700 *Pennsylvania* covered them with main and second battery fire. The mission was completed without interference.

The next morning *Pennsylvania* again bombarded Engebi before and during the approach of the assault waves to the beach. With Engebi secured, she moved southward to the vicinity of Parry Island. On 20 and 21 February she delivered preparation fire on this island which is slightly more than a mile long and less than 600 yards wide.

Item: this island was subjected to a naval bombardment that for volume of fire per square yard has never been equalled anywhere.

AFTER THE CONCLUSION of the Eniwetok Operation there was a lull of almost four months before the next amphibious operation in the Central Pacific. *Pennsylvania* steamed to Majuro and then southward to Havannah Harbor, Efate, in the New Hebrides. There she lay through most of March and April.

There was little activity. Life aboard *Pennsylvania* settled into a relaxed routine. Recreation parties were sent to "Pennsylvania Beach," where each of the men was given two cans of beer, where they could go swimming and hunt for cat-eyes, or barter with the natives for coconuts and grass skirts.

Efate had afforded all hands a well earned rest. Then, to make life complete, the four months' "vacation" wound up with a week in Sydney, Australia. Sydney

LUCKY LADY—Attack on Pearl Harbor damaged *USS Pennsylvania* but she soon returned to seek her revenge.

DC TEAM of *'Pennsy'* relaxes after stopping flooding caused by hit received only 59 hours before war's end.

turned out to be just about what Paris was to our troops in France during World War I.

The men had some difficulty in dealing in pounds and shillings and in understanding certain Aussie expressions but they made out. *Pennsylvania* gave two dances, one for each watch, at the Sydney town hall during her stay there.

After this brief vacation, the ship returned to Efate for a short while and then continued northward into the Solomons.

The Marianas Campaign

ON 10 JUN 1944 *Pennsylvania* was one of a force of battleships, cruisers, escort carriers and destroyers which put to sea, bound for Saipan—the first of our objectives in the Marianas.

For some six weeks—from 14 June until 3 August—with only brief interludes for replenishment of ammunition, the battleship cruised up and down the coast, providing fire support wherever necessary.

The day before the assault landing, the targets were installations in the Nafutan Point-Magicienne Bay area. Although the bombardment had to be conducted at long range, enemy guns on Nafutan Point were knocked out.

Tinian followed, and then Guam. By now, the fire support missions were following a pattern. Three days of bombardment in preparation for assault and landing. Then a two-day round trip to the rear for replenishment of ammunition, then three more days.

By 3 August, *Pennsylvania* had expended in the Guam Operations almost 1800 rounds of 14-inch; 10,000 rounds of 5-inch; 14,000 rounds of 40mm and 1600 rounds of 20mm ammunition. It was done without any personnel or material casualties.

What were the results? Air spotters reported that the ship put out of action 15 planes, six large guns, eight medium guns, three 5-inchers, 12 3-inchers, 19 dual purpose guns, two coast defense guns, eight large AAs, four twin mounts, nine heavy AA's, uncounted machine-guns, mortars and field artillery. There were more odds and ends, but that gives the general idea.

So far, she had received no serious damage since Pearl Harbor, nearly three years earlier, although during her next fire support assignment in the Palau campaign a number of large- and medium-caliber shells landed uncomfortably close and, for a while, she was splashed by ricochets from friendly tanks on the island.

On 25 September she left Kossol Passage and proceeded southward to the Admiralty Islands where she entered a floating drydock for repairs.

The Philippine Campaign

SOME TWO WEEKS later she was again underway, this time bound for the Philippines. It was here that her bombardment, while not so prolonged as the Guam engagement, was heavy—and it was here that she participated in a major (and her only) surface scrimmage. Although she was subjected to incessant air attacks, she remained in the area longer than during any other operation.

Protected by a minesweeping group, *Pennsylvania* and three cruisers provided fire support for beach reconnaissance groups, underwater demolition teams and minesweeping units in preparation for the Leyte landing and, during the actual invasion, delivered more fire support.

However, fire support for amphibious landings was beginning to be old stuff for *Pennsy*. A more interesting situation—particularly for a BB—was shaping up.

On the morning of 24 October it became apparent that a major naval engagement was developing.

Our carrier search planes had located two Japanese forces, each composed of battleships, cruisers and destroyers. One, the Central Force, was in the Sibuyan Sea headed for San Bernardino Strait, from which it could strike southward for the eastern entrance to Leyte Gulf. The other, the Southern Force, was in the Sulu Sea, headed for Surigao Strait, the southern entrance to Leyte Gulf. That afternoon, carrier searches revealed still another enemy force composed of carriers, battleships, cruisers and destroyers.

The Japanese Navy was sailing in full force.

Throughout the afternoon PT boats carrying full loads of torpedoes streaked past *Pennsylvania*, headed southward through Leyte Gulf for Surigao Strait. At 1826 the six battleships, three cruisers, three light cruisers and destroyers in the U.S. force formed battle disposition and steamed southward for Surigao Strait.

Throughout the night the six battleships (*West Virginia, Maryland, Mississippi, Tennessee, California* and *Pennsylvania*) steamed slowly back and forth across the northern end of the straight—just waiting.

At 0130 the next day PT boats stationed well down in Surigao Strait encountered the oncoming enemy force and attacked with torpedoes. Next, our destroyers, on either flank of our enemy's line of approach, attacked with torpedoes and guns. The enemy force steamed on. At 0325, *West Virginia* opened fire, followed shortly by the other battleships and cruisers. The Japanese had run head on into a perfect trap.

Rear Admiral Jesse B. Oldendorf, Commander of the Bombardment and Fire Control Group, executed the naval tactician's dream. He placed the enemy units in a position where they would be subjected to the concentrated fire of our force while able to reply least effectively.

Almost before the enemy could train his guns, he lost two battleships and three destroyers.

That night *Pennsylvania* didn't open fire.

The ship sounded General Quarters at 0130 when the first contact report came through and battle stations were manned in record time. Gun crews stood by for two hours impatiently waiting for the word to commence firing.

It didn't come and there was good reason.

Shortly after daybreak, the Central Force of the Japanese Fleet engaged a group of CVEs operating east of Samar to screen the upper end of Leyte Gulf.

The enemy force had been attacked heavily by carrier planes the day before and had suffered severe losses and damage; it had, nevertheless, continued through San Bernardino Strait.

Our CVEs and their destroyer escort screen began the attack against the invaders.

Vice Admiral Kinkaid, Commander of the Seventh Fleet, at once ordered Admiral Oldendorf to dispatch one division of battleships, one division of cruisers and half the destroyers in his group to assist the escort carriers.

Pennsylvania was one of the battleships to go.

Before the battle force had left Leyte Gulf, the Japanese had begun to retire toward San Bernardino Strait.

Leyte was the first operation in which *Pennsylvania* encountered heavy enemy air attacks.

Because Leyte Gulf was almost completely land-locked, enemy planes were extremely difficult to pick up by radar. Sky lookouts played a major role in this operation.

Crews of the AA batteries of *Pennsylvania* stood watch-and-watch for a period of 24 days and nights, followed by 14 nights. In addition, Air Defense or GQ for air defense purposes was sounded 113 times (not including routine morning and evening GQ).

Item: *Pennsylvania* shot down, either alone or with assistance from other ships, 10 enemy planes, with several other "possibles."

For the next six months or so, *Pennsylvania's* itinerary provides a record of the course of the war:

To Surigao Strait to intercept a mythical Japanese force; thence to Manus to prepare for another amphibious invasion; to Kossol Passage for more ammunition.

South, then west through the Mindanao Sea, the Sulu Sea and out to the China Sea to Lingayen Gulf, Luzon.

With Luzon taken, a period of relatively quiet patrol duty; then with more than 17 months' duty behind her, a lovely, wild month's leave for all hands at San Francisco while *Pennsy* was given a thorough overhaul.

Okinawa

AUGUST SAW HER BACK in Buckner Bay, Okinawa, as flagship for VADM Oldendorf and his staff. Within a few hours after he came aboard as she lay at anchor, a Japanese torpedo plane slipped in over Buckner Bay without any warning and launched its torpedo at the silhouette of *Pennsylvania*.

Later, one of the crew wrote home: "We didn't get the Jap plane, but we sure busted the hell out of his torpedo!"

The torpedo hit well aft on *Pennsylvania's* starboard side and did extensive damage. Many compartments were flooded and the ship settled heavily by the stern. The ship's repair parties and two salvage tugs brought the flooding under control.

The blast caused the death of 20 men and injured 10 others.

The following day *Pennsylvania* was towed into shallower water where salvage operations were continued.

ON THE NIGHT of 13 Aug 1945 she saw her last action of the war. An enemy suicide plane made a run on the ships in the harbor and crashed in flames on the deck of a cargo ship about 1000 yards off the starboard beam of *Pennsylvania*. The secondary battery of *Pennsy* tracked the plane by radar and fired 13 rounds.

ROUND-THE-CLOCK—The big guns of *Pennsylvania* pounded enemy from the Aleutians to the Philippines.

Japan's acceptance of the Allied surrender terms was announced to the crew the morning of 15 August. Two weeks later, after salvage operations were completed, *Pennsylvania* departed from Okinawa. She was towed by two tugs in tandem, with another standing by to assist if necessary. The group made as little as two knots and never more than seven on its way to Guam.

She arrived in Apra Harbor, Guam, on 6 September. The next day she entered ANSD3. While in drydock a large sheet metal patch was welded over the torpedo hole. This and other repairs enabled her to return to the U.S. under her own power. *Pennsy* left drydock on 2 October, moored in the harbor to take on 100 Navy and Marine passengers for transportation to the States and shoved off on the morning of the fourth.

Pennsylvania proceeded toward Puget Sound in company with the cruiser USS *Atlanta* (CL 104) and USS *Walke* (DD 723). En route, she stopped while divers went over the side to inspect the patch. Marine sentries armed with rifles stood by on deck to ward off sharks. They scored one "probable" that day; two days later in a similar episode, the sentries made one "sure" kill while protecting divers.

Survivor of Pearl Harbor, 12 amphibious landings, and the Surigao Straits action, *Pennsylvania* did not come to her end until some time after she served as one of the target ships in the Bikini atom bomb tests in October 1946.

She was finally sunk in deep water off Kwajalein 10 Feb 1948 after extensive radiological and structural studies had been made to determine the extent of the damage. She was busy right up to the end.

FINAL HOURS—After surviving Bikini tests, out-dated BB 38 is towed to sea for 'burial' under Pacific waters.

TAFFRAIL TALK

DEVOTED READERS of this column may recall that we earlier expressed a comfortable confusion over some of the "scientific" pronouncements of the USL *Echo*. You will be happy to know that the field of sports also lends itself to an equal profusion of unclarity. We quote the following translation from "L'Echo du Maroc" sent by our unofficial and unpaid Kenitra (Morocco) correspondent:

> Baseball is a game which is placed between two teams of nine players each. There is a ball and an engine to play with which is called "bat." The ground on which the play is going on is square and in the middle there is a round place called "diamond" where the pitcher is staying. He is charged to send the ball to the catcher, this man is placed in the home-plate from where the ball has been sent and has to return to. The other players are outside the ground. These men will get in the field when the players will throw the ball three times outside the lines and will be disqualified. The man who sends the ball back to home-plate is supposed to be the winner. The baseball game is a very tiring sport. It is very popular in England but especially in America.

All right now, team. Break clean and come out fighting.

We never know who's watching and what they make of our behavior. But we do know that it's more noticeable when someone gets into trouble than when he behaves himself.

Nevertheless, two American tourists happened to be in Bergen, Norway, at the same time ComDesRon 12 and ComDesDiv 122 and eight U. S. Navy ships made a call. They were so impressed by the good manners of the Navymen that they wrote a letter to the Assistant Secretary of the Navy:

"My husband and I have been in Bergen, visiting at the same time that 3000 of our Navymen have been in port. It is with real pride that we have watched them—always immaculately attired—courteous—and friendly.

"They show American enthusiasm for seeing all the sights, much picture taking and exploring, and so far as we could see, with the good manners that are a credit to our country.

"The town people really seem to like them and report to us that they are always well behaved and in order.

"I am listing the ships involved—USS *Yosemite* (AD 19), *Gainard* (DD 706), *Hyman* (DD 732), *Compton* (DD 705), *Davis* (DD 937), *Bristol* (DD 857), *Purdy* (DD 734) and *Harlan R. Dickson* (DD 708)—as I am certain they would appreciate some expression of commendation."

That, gentlemen, is international diplomacy of the highest order. And thank you, Dr. and Mrs. deVries, for your kind words. You're pretty good diplomats yourselves.

The All Hands Staff

The United States Navy
Guardian of Our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families.

Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mability, surprise, dispersal and offensive pawer are the keynotes af the new Navy. The raots of the Navy lie in a strong belief in the future, in continued dedicatian to aur tasks, and in reflection on our heritage from the past. Never have our appartunities and our responsibilities been greater.

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• AT RIGHT: BIG SPLASH—Sixth Fleet Marines splash through the surf as they charge from Navy landing craft during amphibious exercise in Med.


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